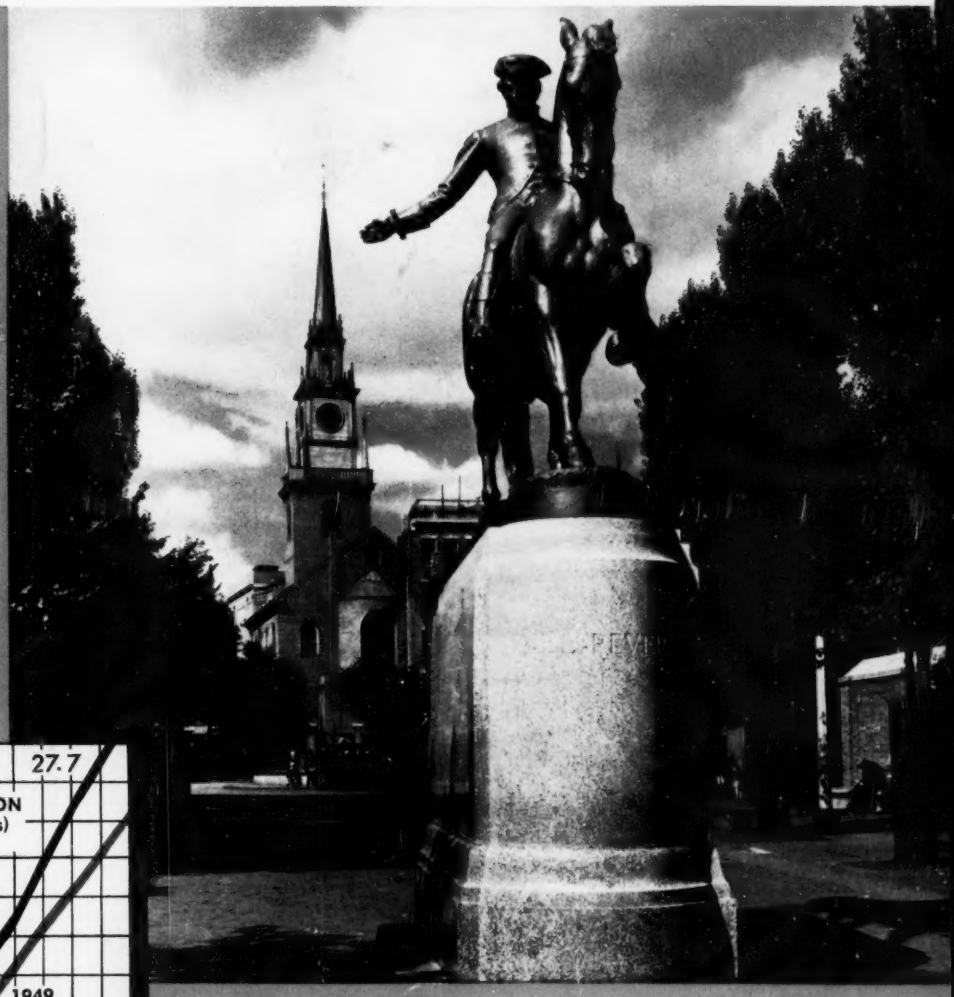
The CONSTRUCTOR

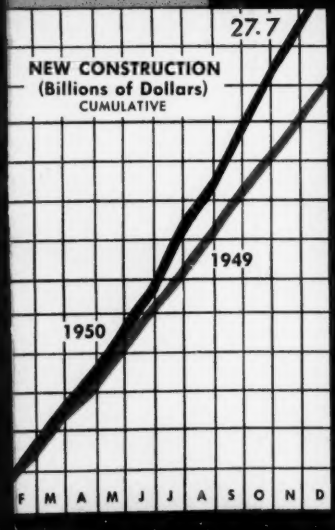
OFFICIAL PUBLICATION OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Volume XXXIII · JANUARY 1951 · Number 1

- BUILDINGS
- HIGHWAYS
- AIRPORTS
- RAILROADS

PUBLIC WORKS





Defense Program Now Moving into Severe Phase—P. 23

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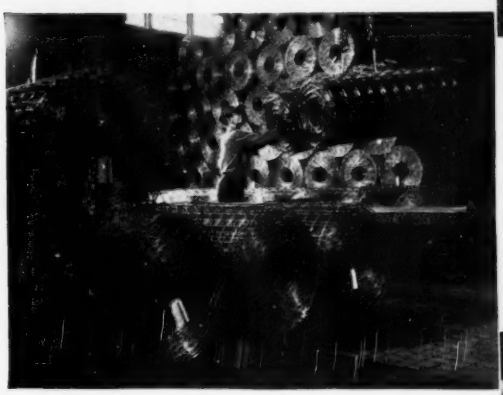

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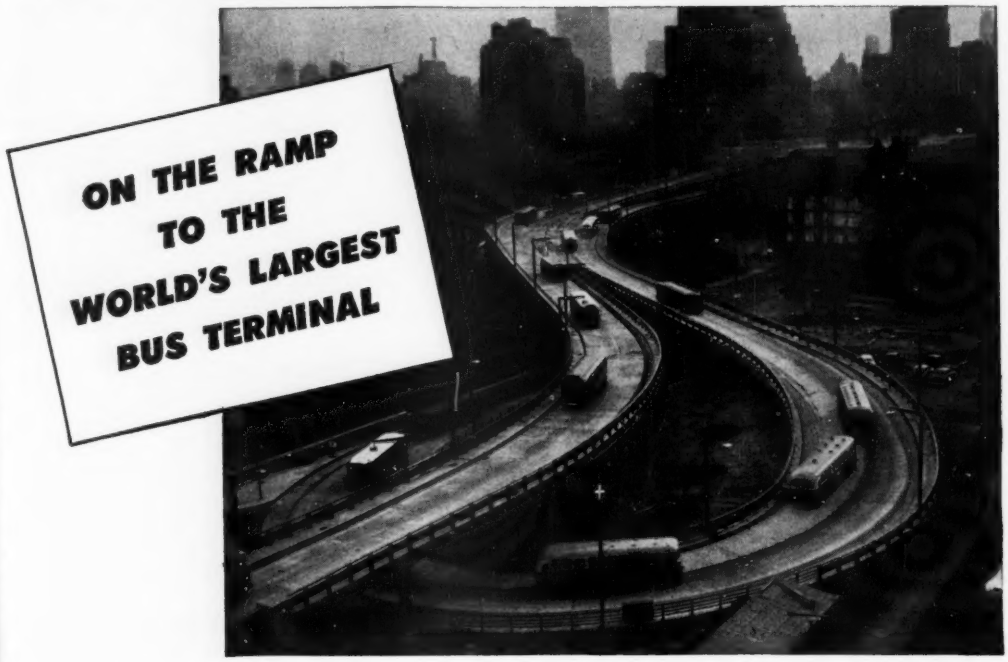
It's Always Fair Weather—



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The CONSTRUCTOR

BUILDINGS • HIGHWAYS • AIRPORTS RAILROADS • PUBLIC WORKS

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COVER

Paul Revere's statue in historic Boston, depicted on this month's cover, is a reminder that the time is fast approaching when the 32nd annual convention of The Associated General Contractors of America will meet in that city, February 26-March 1. By late December about 700 reservations already had been received by the A.G.C. of Massachusetts from members of 65 chapters. An outline of events slated for the conclave will be found on page 34.

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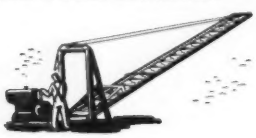

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The Presidential proclamation of a national emergency on December 16 gives Mr. Truman additional authority for the mobilization program, among these powers being the suspension of laws relating to the wages and hours of laborers and mechanics on public works projects and the waiving of advertising for defense contracts. At the President's request, Congress is developing legislation that would restore Title II of the First War Powers Act which gives the President the power to authorize any government department or agency engaged in the national defense to make contracts and changes in contracts without regard to the provisions of law governing such contracts whenever he deems such action would facilitate the prosecution of the national defense. (Page 23)

•

Business is planning to expand its plant and equipment at the rate of $21.9 billion in 1951, according to a survey of business plans by the Department of Commerce and the Securities and Exchange Commission. This is 20 per cent higher than the estimated outlays for 1950 and about one-seventh more than the peak outlays of 1948. Two-thirds of the planned increase for 1951 over 1950 is attributable to manufacturing companies. Iron and steel will practically double their outlays in 1951. The chemistry industry plans substantial additions. (Page 25)

•

A record volume of new construction reaching a record-breaking total of almost $27.75 billion in 1950 is reported by the Bureau of Labor Statistics and the U. S. Department of Commerce. The number of new housing units started is far above any previous year's total, employment in contract construction hit an all-time peak, and the output of many building materials broke all previous records. (Page 25)

•

More than $2.5 billion for defense construction was slated for inclusion in the Second Supplemental Appropriations bill which conferees were endeavoring to iron out before the close of the session. President Truman asked for $18 billion for emergency defense purposes. Subsequently the House passed a $17.8 billion measure. The Senate appropriated $20.1 billion. Army, Navy and Air Force Construction projects amount to about $1.4 billion, with the Atomic Energy Commission building programs calling for approximately $1 billion. Other funded construction work includes access roads and veterans' hospitals. (Page 29)

•

Secretary of Commerce Sawyer, in a year-end report on the economic situation, announces that economic activity rose throughout 1950, reaching the wartime peak at the end of the year. The total output or gross national product approximated $280 billion or about 9 per cent above 1949.

•

Legislation to establish a Civil Defense Administration and define the unprecedented powers granted to the federal government to aid communities stricken or threatened with attack has been agreed upon by House and Senate conferees and was awaiting action at the year's end. Estimates were reported by the Senate Armed Services Committee that during the next three years $2¼ billion might be spent for the construction of shelters. The entire program over a three year period is estimated at a cost of $1,670,000,000 for the federal government and $1,430,000,000 for the states. (Page 29)

•

Information on the policy and procedure of the Corps of Engineers in letting contracts for military construction and rehabilitation of World War II facilities is made available by the Department of the Army. Stress is laid on the fact that the Corps of Engineers operates through its division and district engineers. Restoring facilities of the last war will be under the command of the military area. Requests for information should be directed to these sources and not to Washington. (Page 32)

•

Transportation requirement estimates will be considered by a subcommittee made up of representatives of the Department of Defense, Department of the Interior, Defense Transportation Administration, Maritime Commission, Civil Aeronautics Administration, Civil Aeronautics Board, National Advisory Council for Aeronautics and the Bureau of Public Roads, General Philip B. Fleming, Under Secretary of Commerce for Transportation, announced in an address in Miami last month. This subcommittee will be under his supervision.

State and municipal highway departments are urged by Commissioner MacDonald of the Bureau of Public Roads to take immediate and comprehensive action in surveying their requirements of materials for all highway construction and maintenance. Addressing the A.A.S.H.O. convention in Florida in December, Mr. MacDonald, speaking as head of the claimant agency for all highway materials requirements, urged the states to determine whether projects could be held in service for ten years by maintenance, or if reconstruction was required, priorities must be fixed to establish the most essential services first. (Page 45)

•

Increasing shortages of technical manpower is a matter of concern to both industry and the military. An engineering manpower commission made up of representatives of the six major engineering societies has made recommendations for increasing enrollment in engineering colleges and in stimulating interest in all fields of engineering. The commission asks that all men up to 70 who have engineering degrees, are attending engineering schools or are employed on engineering projects be registered. (Page 24)

•

The Highway Research Board will celebrate its 30th anniversary at its annual meeting to be held in Washington, D. C., January 9-12. Among the speakers will be Detlev W. Bronk, president of Johns Hopkins University and President of the National Academy of Sciences, and Commissioner Thomas H. MacDonald of the Bureau of Public Roads. A report on Road Test One-MD at La Plata, will be made by R. W. Crum, Fred Berggraf, A. Teragin and Special Engineer E. C. Sutherland. More than 100 technical papers will be given in the three and one-half days.

•

The Department of the Army has asked The Associated General Contractors of America to sponsor and help train an additional 20 reserve construction units in the Army Affiliation Program. This raises the association's quota from 85 to 105. Ten of A.G.C.'s sponsored units are now on active duty and 70 have been placed on the troop list as available for call to active duty. (Page 32)

IN ~~1950~~ 1951

FOR THE ~~13th~~ 14th CONSECUTIVE YEAR

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Austin Western

SINCE 1859

A Series of Graphs Outlining the Construction Trend

Compiled by The Associated General Contractors of America

TREND OF CONSTRUCTION COSTS

The average of construction costs in the principal construction centers of the United States for December stands at Index Number 371, according to the A.G.C. Index. The cost figure for December 1949 was 345. The 1913 average equals 100.

WAGE AND MATERIAL PRICE TRENDS

The average of wages in the principal construction centers of the United States stands at 494 for December. One year ago the average stood at 464. The average of prices paid by contractors for basic construction materials for December stands at Index Number 290. The average a year ago stood at 266. The 1913 average, again, equals 100.

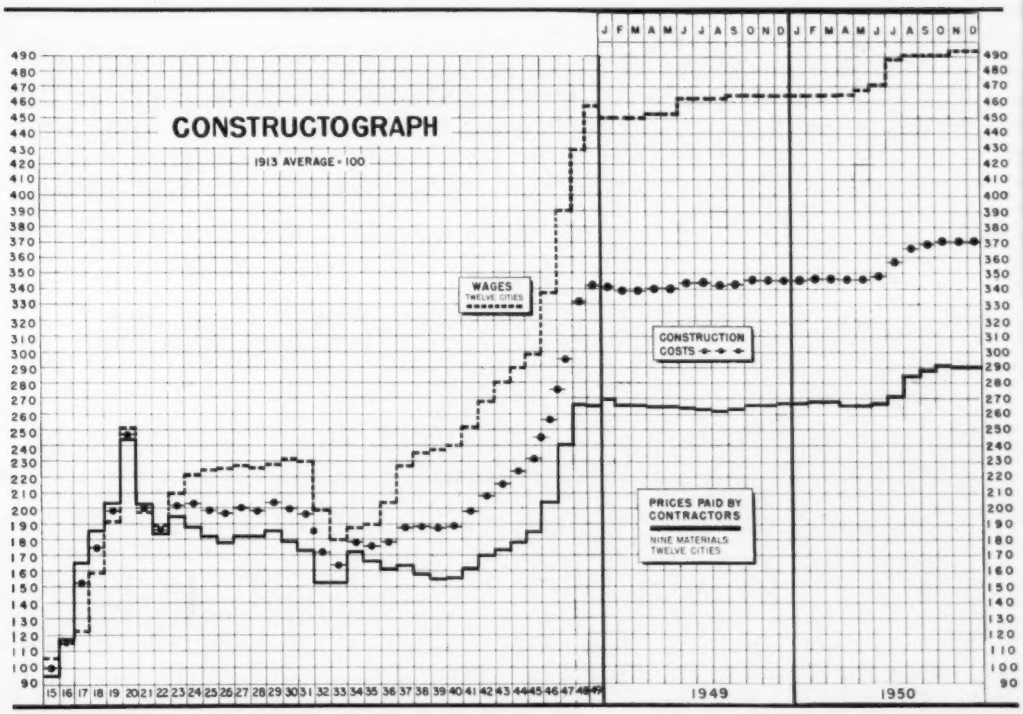
CONTRACT AWARDS IN 37 STATES

The volume of contracts awarded during November (Index Number 222, based on 1936-1938) is a decrease of 10 points from October, and an increase of 12 points from November 1949.

REVENUE FREIGHT LOADINGS

Revenue freight loaded during the first 51 weeks of 1950 totaled 38,297,147 cars. For the same period in 1949, loadings amounted to 35,415,621 cars. This represents an increase of 8 per cent.

● Wage, Material Price and Construction Cost Trends



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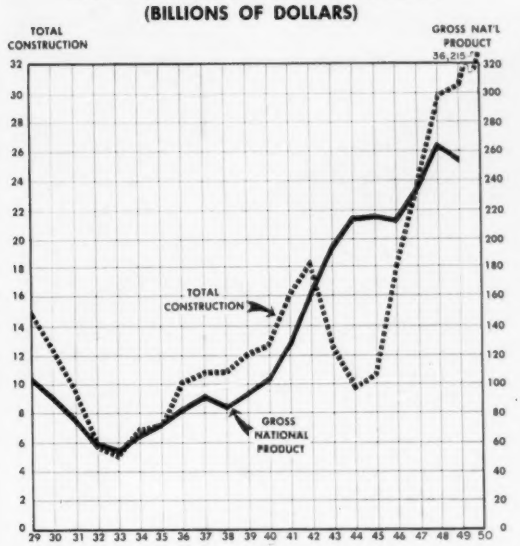
The Euclid Loader leaves a smooth, clean cut when grading uneven contours. Operator has instant control of belt movement and adjustment of the cutting blade for depth and angle of the cut.

EUCLIDS *Move the Earth*

● TOTAL Construction compared with Gross National Product

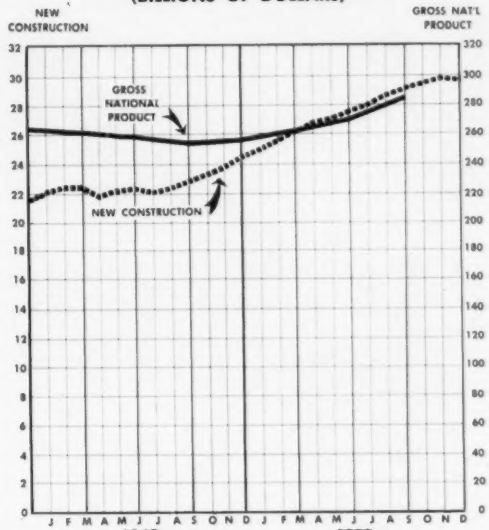
(BILLIONS OF DOLLARS)



DATA SUPPLIED BY DEPT. OF COMMERCE

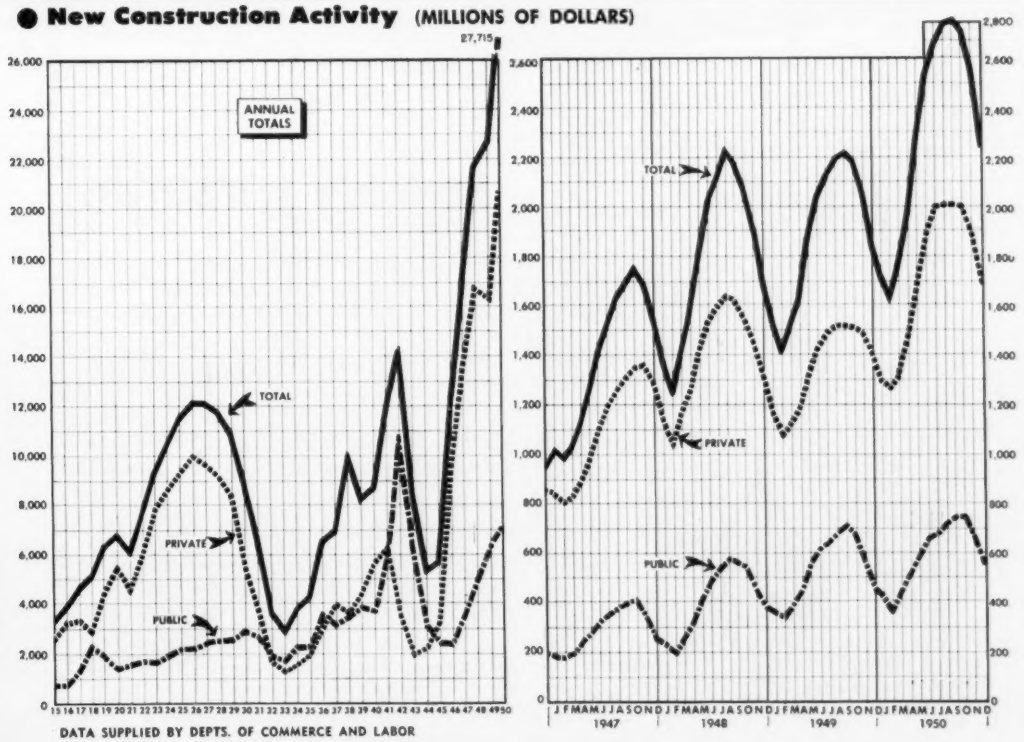
● NEW Construction compared with Gross National Product*

(BILLIONS OF DOLLARS)



** Seasonally adjusted at an annual rate*

● New Construction Activity (MILLIONS OF DOLLARS)



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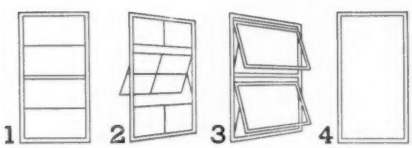

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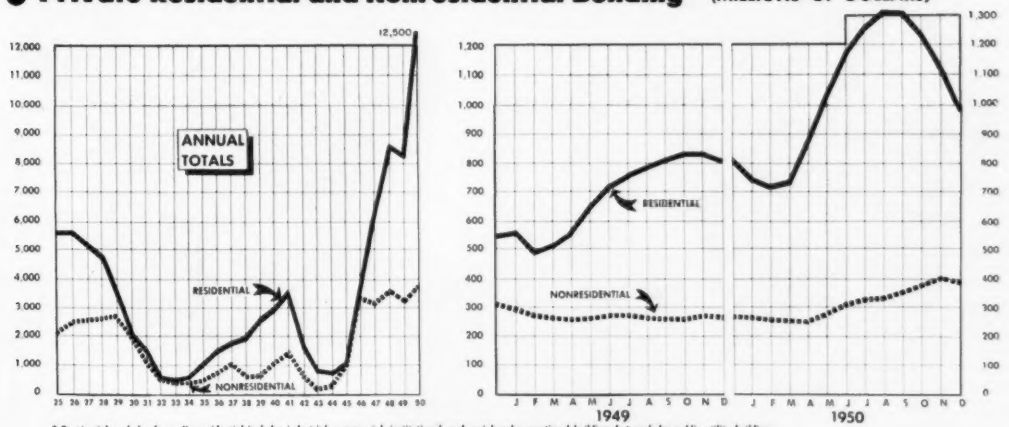
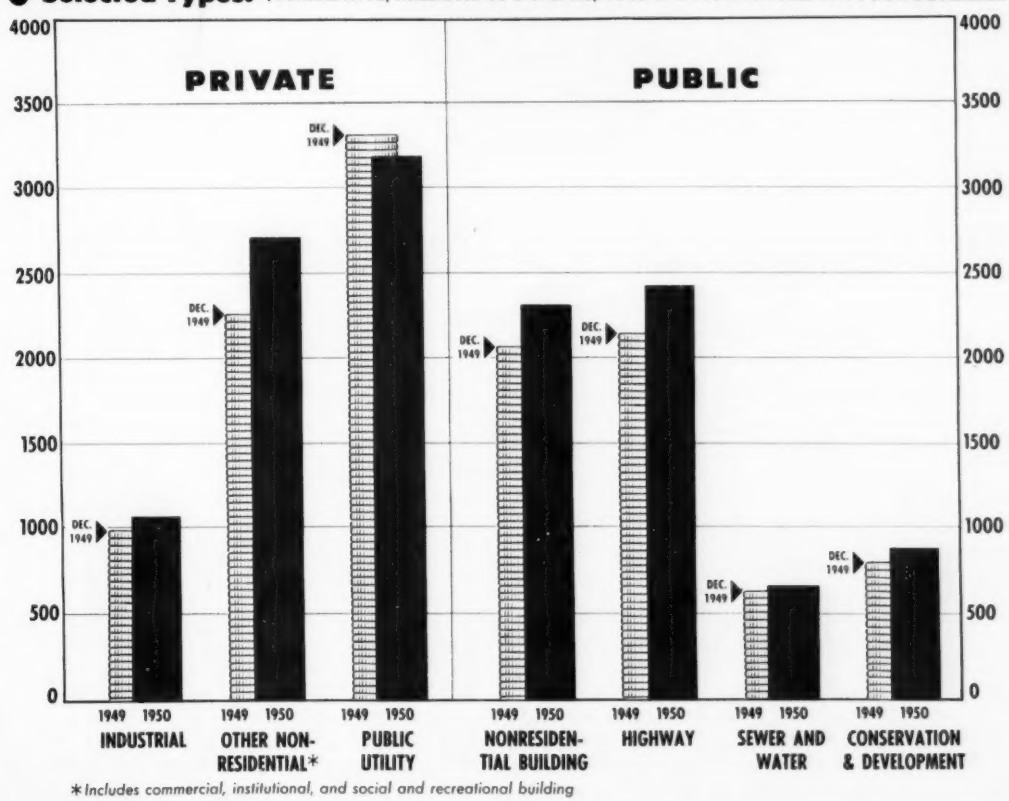
NEW CONSTRUCTION ACTIVITY

● Private Residential and Nonresidential Building* (MILLIONS OF DOLLARS)



* Residential excludes farm; Nonresidential includes industrial, commercial, institutional, and social and recreational building, but excludes public utility building.

● Selected Types: (CUMULATIVE, MILLIONS OF DOLLARS) 1949 and 1950 VOLUME THROUGH DECEMBER



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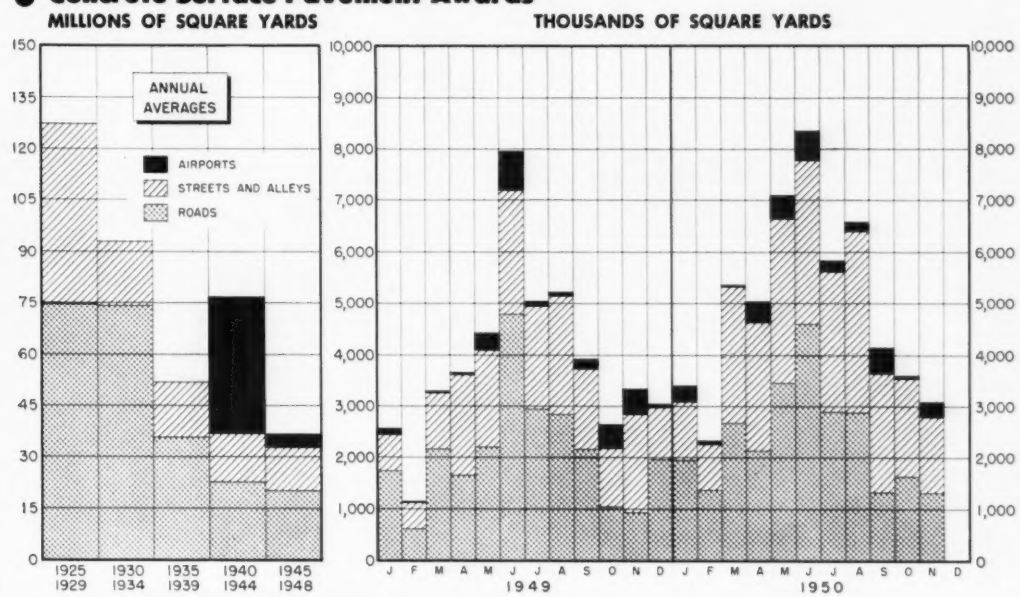
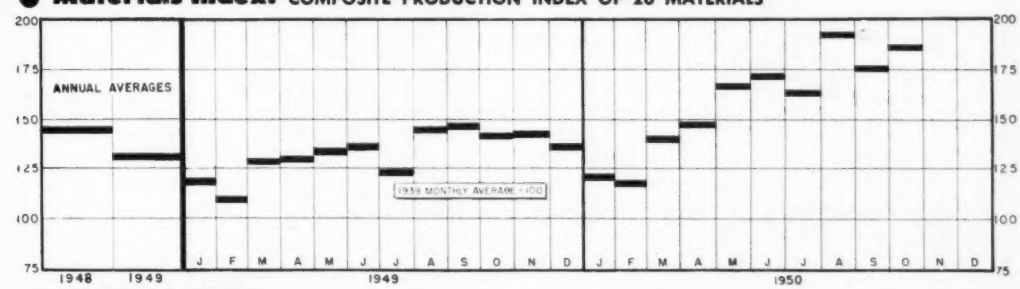


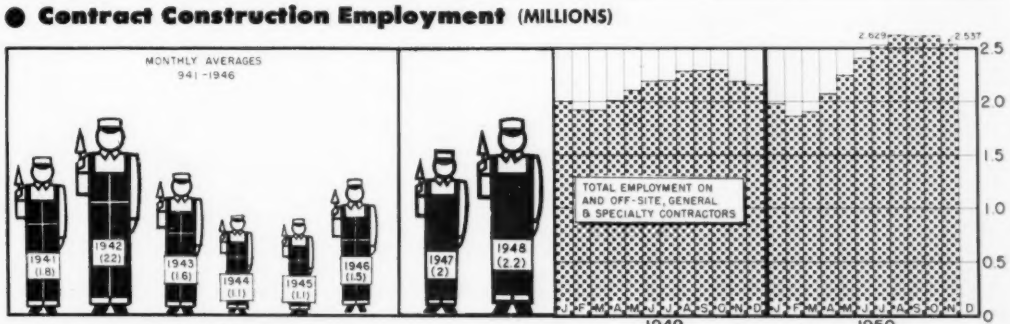
DATA SUPPLIED BY PORTLAND CEMENT ASSOCIATION

● Materials Index: COMPOSITE PRODUCTION INDEX OF 20 MATERIALS

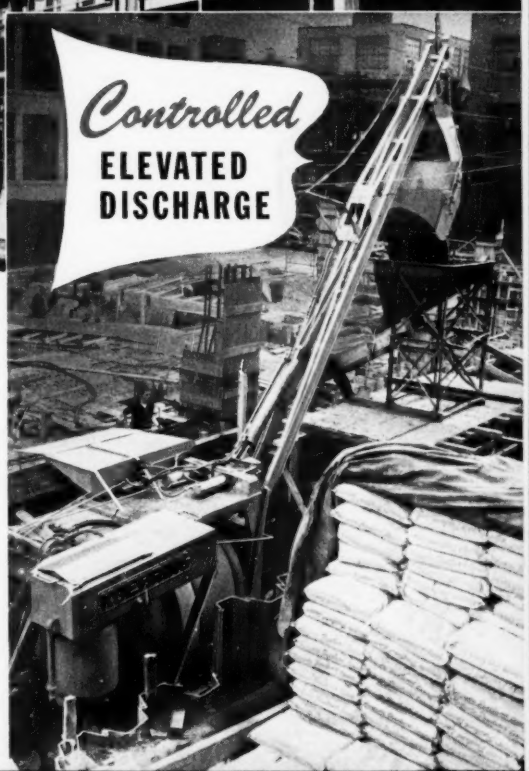


DATA BY DEPT. OF COMMERCE

● Contract Construction Employment (MILLIONS)



DATA BY BUREAU OF LABOR STATISTICS



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offers a new low-cost method of producing concrete for floors, foundations, pilings on building construction . . . bridges, aqueducts, tunnels, retaining walls, culverts, streets, highway widening, special batching, etc. Boom elevates 60°, swings in a 160° arc, reaches up and out, bucket discharges controlled batch into overhead forms, hoppers or chutes at a height of 21 feet (higher with special boom). The 16-E mixes and distributes up to 50 cu. yds. per hour, exceeding capacity of larger 27-E single-drum paver. 7-second skip hoist, split-second Autocycle mixing, vertical syphon-type water tank all reduce cycle time and assure maximum-strength concrete. This rubber-tired 16-E *twinbatch* also works over pavement, drives job to job at 6 m.p.h. Ask, too, about Koehring 34-E *twinbatch* for your major paving jobs.

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SEE YOUR KOEHRING DISTRIBUTOR FOR COMPLETE FACTS

KOEHRING *twinbatch*® PAVERS

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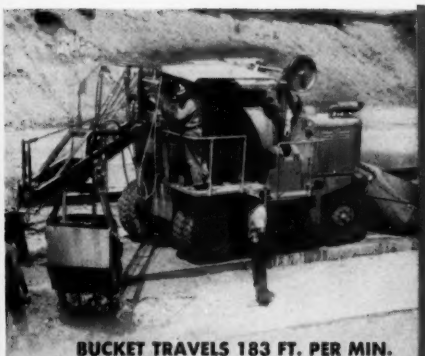
KOEHRING Company, Milwaukee 16, Wisconsin *Subsidiaries . . .*

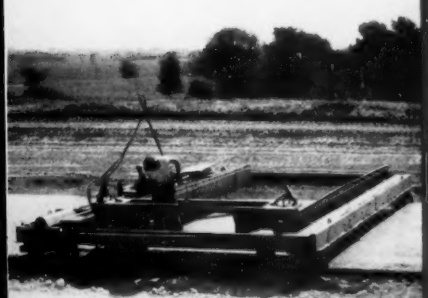


BUCKET TRAVELS 183 FT. PER MIN.

on horizontal boom (92' per min. elevated) . . . pours controlled batch anywhere along boom. Simultaneous bucket travel and boom swing speed distribution with 16-E.

BIG-PRODUCTION 34-E *twinbatch*

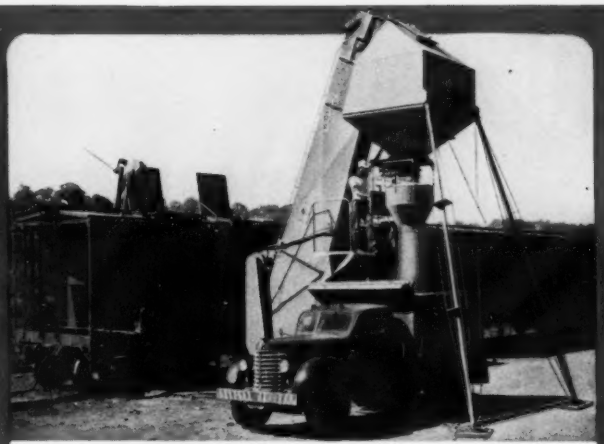
hits top output of 86.7 batches an hour (60-second mixing time). This reserve production capacity picks up lost time from normal delays, assures fast schedules.



"TIMELY", PRECISION-FINISHING

Koehring Longitudinal Finisher can operate at almost twice the speed of a 34-E paver, produce mechanically-accurate slabs, 8 to 30', with uniform crown transitions.

. . . JOHNSON • PARSONS • KWIK-MIX



DUAL-PURPOSE ELEVATING CHARGER

. . . For batching, Johnson Elevating Cement Charger has a size 14, 1000-lb. capacity cement weigh batcher, hung under a 33-bbl. overhead storage hopper . . . or, for charging dual-batch trucks, two 1000-lb. weigh batchers can be used. It's quickly adapted to transfer plant by removing batchers and batcher cone, and bolting a 50-bbl. extension section to hopper. Charger is easily moved, erected by dump truck, no crane needed. See your Johnson distributor, too, for mix plants, buckets, bins, elevators, batchers, silos.

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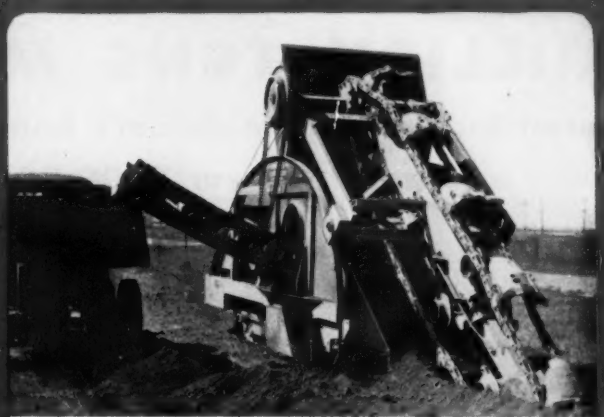

221 TRENCHLINER® HAS 30 DIGGING FEEDS

. . . 3 bucket line and conveyor belt speeds, 4 travel speeds, plus full reverse of all operations . . . produces clean-cut trenches 16 to 36" wide, up to 8'-6" deep. Flexibility is further increased with shiftable boom for digging behind either crawler . . . 1-minute power-shift conveyor for discharging right or left . . . constant discharge height for loading trucks. Let your Parsons distributor tell you more about this heavy-duty 221. He can also show you 4 other Trenchliner sizes that will suit your exact trenching requirements.

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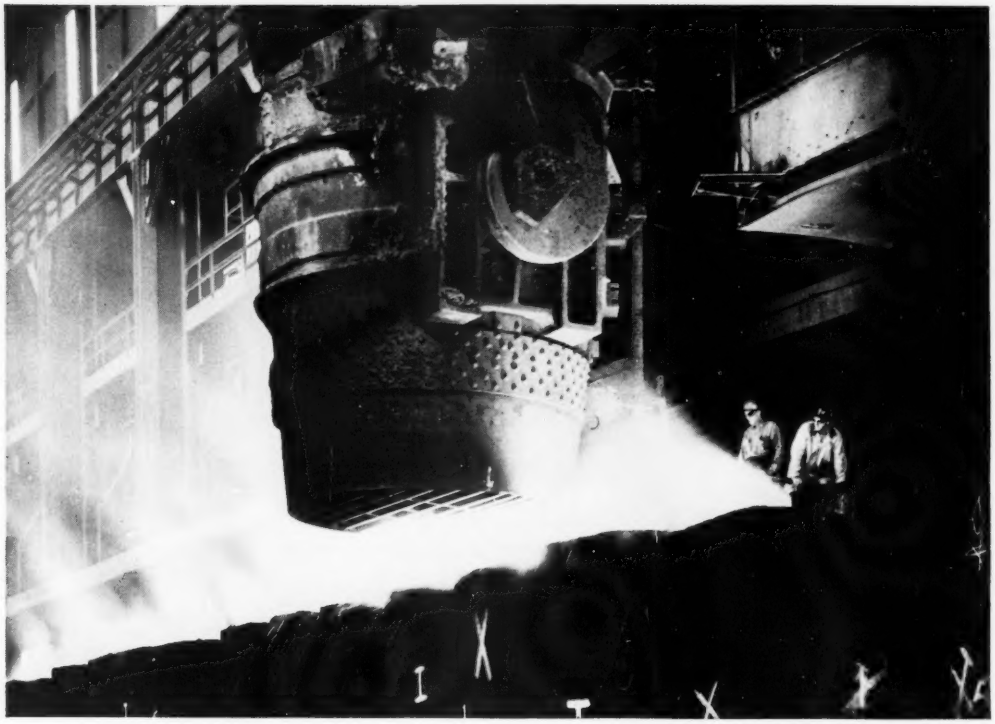


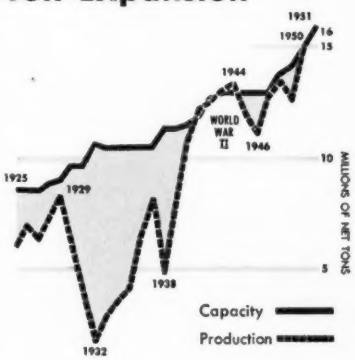
MILLION TONS MORE STEEL

Latest Increase in Bethlehem's Annual Capacity Climaxes 5 Years of Postwar 3,100,000-Ton Expansion

On January 1 of this year Bethlehem's steel making capacity stood at 16 million ingot-tons annually—*an increase of 1 million tons* over a year ago.

Since the war ended we have increased our annual steelmaking capacity *3,100,000 tons, or 24 per cent.*

Moreover, as the chart at the right shows, Bethlehem's steel capacity has nearly doubled in 25 years. Additional capacity can and will be created as it is needed.



BETHLEHEM STEEL ★ BETHLEHEM STEEL ★

For Moderate Income Families in Large Cities

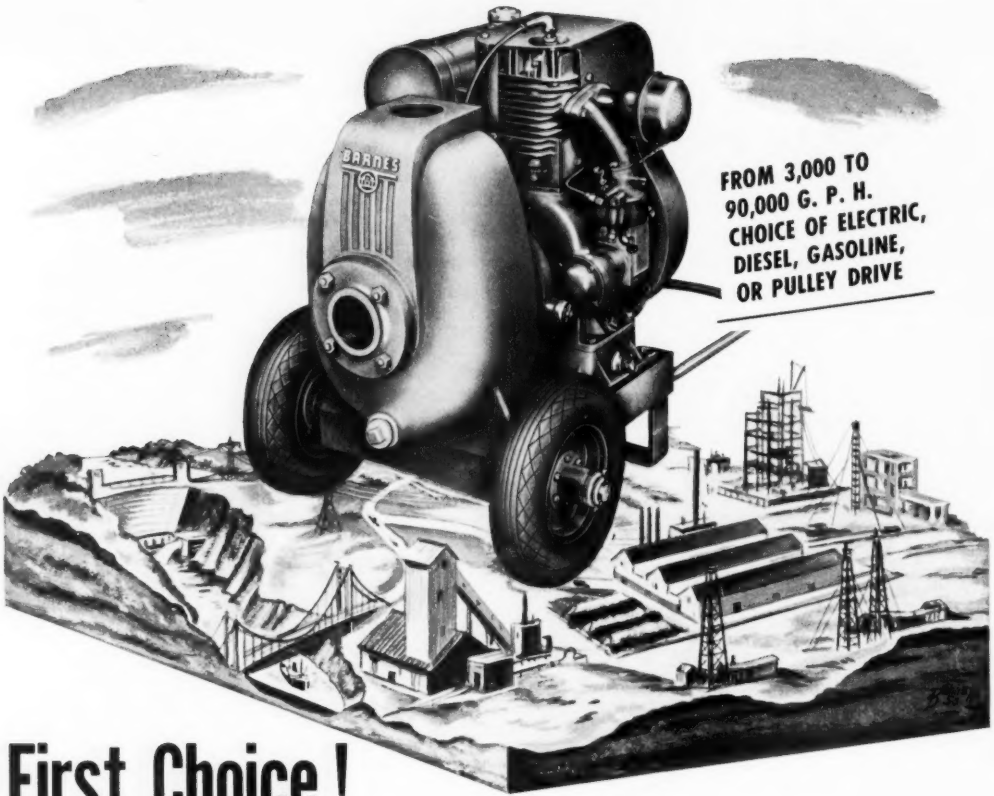
(Formerly referred to as the "Cost of Living Index," compiled by the Bureau of Labor Statistics)

THIS table indicates the average changes in retail prices of selected goods, rents and services bought by the average family of moderate income from September 15, 1948 to November 15, 1950.

They are presented here for use by employers who may wish to take these cost of living data into consideration when contemplating adjustments of wages based on increased living costs.

The Bureau of Labor Statistics surveys 10 key cities every month and 24 other large cities quarterly. Prices are obtained on food, fuel, apparel, house furnishings and miscellaneous goods and services. Rental information is obtained quarterly only for all cities. The computations are based on the indexes for the years 1935-39, which are taken as the average of 100 points.

	1948			1949			1950		
	SEPT. 15	OCT. 15	NOV. 15	SEPT. 15	OCT. 15	NOV. 15	SEPT. 15	OCT. 15	NOV. 15
Average	174.5	173.6	172.2	169.6	168.5	168.6	173.8	174.8	175.6
Birmingham, Ala.	178.6	176.9	175.0	171.8	170.3	170.5	179.7	179.1	180.3
Mobile, Ala.	177.3	.....	.....	169.2	.....	.....	172.9	.....	.....
Los Angeles, Calif.	171.0	171.8	172.2	167.1	166.5	166.6	169.5	171.3	173.2
San Francisco, Calif.	177.1	.....	.....	173.0	.....	.....	176.0	.....	.....
Denver, Colo.	.....	171.0	.....	.....	164.6	.....	.....	172.8	.....
Washington, D. C.	.....	.....	167.1	.....	.....	166.2	.....	.....	171.9
Jacksonville, Fla.	179.1	.....	.....	176.5	.....	.....	182.4	.....	.....
Atlanta, Ga.	.....	.....	173.7	.....	.....	170.5	.....	.....	178.9
Savannah, Ga.	.....	178.4	.....	.....	173.4	.....	.....	181.6	.....
Chicago, Ill.	179.4	178.1	175.9	175.8	174.4	175.3	179.8	180.4	180.6
Indianapolis, Ind.	.....	178.0	.....	.....	172.1	.....	.....	179.8	.....
New Orleans, La.	.....	.....	176.6	.....	.....	173.3	.....	.....	178.5
Portland, Maine	170.7	.....	.....	164.9	.....	.....	167.9	.....	.....
Baltimore, Md.	179.2	.....	.....	174.0	.....	.....	178.1	.....	.....
Boston, Mass.	169.0	167.8	166.7	165.4	164.1	164.0	168.2	169.4	169.6
Detroit, Mich.	175.4	174.6	173.1	170.4	168.7	169.8	175.4	177.7	179.2
Minneapolis, Minn.	173.8	.....	.....	168.3	.....	.....	173.2	.....	.....
Kansas City, Mo.	.....	167.5	.....	.....	161.1	.....	.....	167.4	.....
St. Louis, Mo.	175.0	.....	.....	168.9	.....	.....	175.0	.....	.....
Manchester, N. H.	.....	176.5	.....	.....	169.3	.....	.....	176.2	.....
Buffalo, N. Y.	.....	172.7	.....	.....	167.4	.....	.....	173.0	.....
New York, N. Y.	173.3	171.7	171.0	167.5	165.9	165.8	170.3	171.0	172.1
Cincinnati, Ohio	176.3	175.5	173.8	170.8	168.7	168.3	175.5	176.0	176.0
Cleveland, Ohio	.....	.....	176.2	.....	.....	170.3	.....	.....	178.6
Portland, Ore.	.....	180.1	.....	.....	173.6	.....	.....	183.4	.....
Philadelphia, Pa.	174.8	174.1	171.7	169.6	168.9	168.6	173.6	173.8	174.1
Pittsburgh, Pa.	178.3	177.1	175.9	172.3	171.1	171.3	177.7	179.2	178.9
Scranton, Pa.	.....	.....	169.4	.....	.....	166.3	.....	.....	173.7
Memphis, Tenn.	177.1	.....	.....	172.7	.....	.....	177.2	.....	.....
Houston, Texas	175.4	174.7	173.9	171.4	172.0	173.3	179.8	179.9	181.1
Norfolk, Va.	.....	.....	174.0	.....	.....	168.2	.....	.....	177.0
Richmond, Va.	.....	170.0	.....	.....	164.9	.....	.....	171.6	.....
Seattle, Wash.	.....	.....	174.3	.....	.....	171.6	.....	.....	180.8
Milwaukee, Wis.	.....	.....	171.2	.....	.....	168.4	.....	.....	179.1



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Barnes Automatic Centrifugals deliver not 1,000—not 10,000—but 33,000 gallons of water for each gallon of gas used. That's equal to 4⅛ railroad tank cars filled and overflowing. And that's pumping economy unmatched!

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Barnes Self-Priming Centrifugals will prime with pump body filled as low as ⅓ normal water level. Exclusive Barnes Peri-Prime feature gives surer, faster priming—with no loss in pump efficiency in recirculation!

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BUY THE BEST — BUY BARNES

Sidelights for Contractors

By John C. Hayes, *Legal Adviser*

Taxes

Excess Profits Tax.—As passed by the House of Representatives, the Excess Profits Tax Act of 1950, effective retroactively to July 1, 1950, would in effect impose a corporate excess profits tax rate of 75%, with the limitation that the combined rate of corporate income and excess profits taxes could not exceed 67% of a corporation's net income. The base period credit could be computed on average earnings during the years 1946 through 1949, or on invested capital, with a minimum credit of $25,000. Unlike the World War II excess profits tax, the act would not have a general relief section but would attempt more in detail to prescribe specific methods of obtaining relief. On the Senate's consideration of the proposed act, it is probable that substantial changes will be made.

Reconditioned Machinery. — Where the useful life of certain machinery had expired and its cost had been fully depreciated, the Tax Court held that the cost of reconditioning such machinery was a capital expenditure recoverable over the 3 to 6 year added useful life of the machines. Had the expenditure been merely to keep the machines in operating condition rather than appreciably to increase their value and useful life, the court agreed the cost would have constituted a deductible expense.

Partnership Income.—Under a partnership agreement, in accord with the local state law, providing for continuance of the partnership after the death of a partner, the Tax Court decided a deceased partner's final tax return for the period of the calendar year until his death properly excluded his share of the partnership income from the close of its fiscal year until the date of his death.

Officers' Bonus.—The Court of Claims has determined that so-called bonus payments to officer-stockholders were not deductible as reasonable compensation for services but should be treated as distributions of profit, since the officers' salaries, aside from any bonuses, had increased greatly as the business increased but there had been hardly any increase in distributions to the minority stockholders.

Repair Parts.—The Tax Court has permitted a taxpayer on the accrual basis of accounting to deduct the cost of acquisition of repair parts in the year in which accrued and paid although such parts were not actually used until after the close of that year.

Personal Holding Company.—Curtailment of the activities of a closely held corporation, intentionally or not, may result in its becoming a personal holding company and liable to heavier tax. Where war shortages prevented such a corporation from receiving operating income and limited its earnings to dividends from a subsidiary, the Tax Court held it was liable to a personal holding company surtax. No penalty was added for failure to file personal holding company returns, since the taxpayer had relied upon the advice of an experienced accountant.

Gift Tax.—The Supreme Court ruled that transfers of property by a wife to her husband under a settlement agreement that was approved in a divorce decree were not subject to gift tax. The transfers were pursuant to the divorce decree and were thought by the court to be comparable to transfers between two partners on dissolution of a partnership.

Public Contracts

Government's Delay. — Distinguishing the Supreme Court's decision in the Foley case on its facts, the Court of Claims has awarded damages to a war contractor to reimburse it for additional expenses incurred as a result of the government's delay in supplying tail assemblies in time to permit it to furnish concrete practice bombs within the specified contract period. The court noted that the government was far from diligent in living up to its implied obligation and that the contractor had expected to begin immediately and was ready, able, and willing to do the job according to schedule. There was nothing to suggest to the contractor that it should consider the possibility that the government's performance would be delayed.

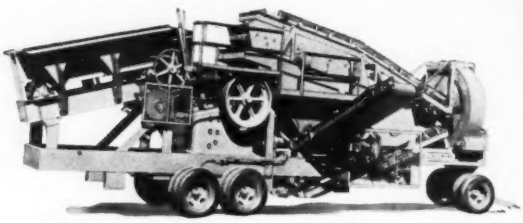
Remission of Damages.—The failure by a government contractor to exercise its contractual right to ask the contracting officer for an extension of time for performance, is sufficient cause, according to an opinion by the comptroller general, for the latter not to waive liquidated damages for delay, pursuant to Section 10 (a) of the 1950 amendments to the Federal Property and Administrative Services Act.

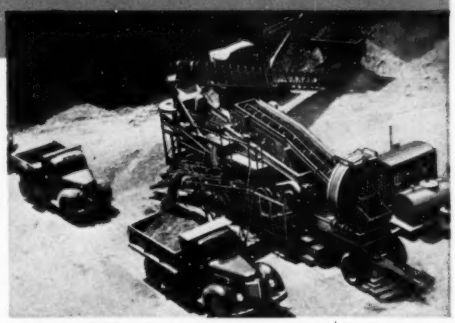
Deviation in Bidding.—The comptroller general ruled that a low bidder's deviation from the government's invitation to bid by stipulating that the government furnish certain parts and by agreeing to start delivery within 75 days rather than the stated 60 days, prevented acceptance of the bid, although these deviations were waived by the bidder after the bid opening date.

Cost-Plus Contracts.—Under its contracts with the Maritime Commission on the basis of cost-plus-a-fixed-fee, the Court of Claims has allowed reimbursement to a shipbuilding contractor for the full amount of capital stock taxes as computed and paid by the contractor, for legal fees and court costs incidental to suits for overtime pay, and for a reasonable attorney's fee to prosecute its claim for reimbursement of such expenses.

Minimizing Damages. — A Circuit Court of Appeals, in holding that the United States under the facts at issue had no duty to minimize damages resulting from a contractor's breach of his agreement, quotes with approval: "Where the party whose duty it is primarily to perform a contract, has equal opportunity for performance, and equal knowledge of the consequences of nonperformance, he cannot, while the contract is subsisting and in force, be heard to say that plaintiff might have performed for him."

4 TOP PRODUCERS THAT INVITE COMPARISON





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2 TwinDual Gravel King—three stages of crushing, two screens for pits with large boulders

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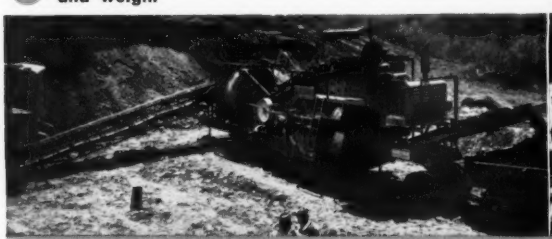

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Out in front! Universal TwinDual Plants are breaking production records and cutting costs per ton on finished aggregate.

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The Mobilization Speedup

INDICATIONS at the first of the year were that the pattern of the nation's partial mobilization program will become more clear as it unfolds at an accelerated rate.

The appropriation bill completed by the 81st Congress on the final day of its last session makes available approximately $2 billion for defense construction. Previously approximately the same amount had been appropriated for the purpose. Contract awards can be expected to be made at a faster pace.

At the same time a greatly expanded program of industrial construction is developing as the government is issuing certificates of necessity for accelerated amortization of production facilities.

Charles E. Wilson, who retired as president of the General Electric Company to become Director of the Office of Defense Mobilization in the middle of December, demonstrated in the War Production Board during World War II that he deserves his reputation for getting things done promptly and efficiently.

His two principal assistants are men of high caliber. One is General Lucius D. Clay, the Corps of Engineers officer who rose to become Commander-in-Chief of U. S. Forces in Europe and Military Governor of Germany. During World War II he was in charge of procurement, and also served as Deputy for War Program in the Office of War Mobilization.

The other is Sidney J. Weinberg, who participated in setting up the War Production Board and its predecessor agencies. He subsequently became WPB Vice Chairman when Mr. Wilson was Chairman.

Other recent appointments to mobilization agencies demonstrate the trend to placing men of proven capacity in responsible positions. Frank R. Creedon, who directed a number of important construction programs during World War II, has been appointed Assistant Administrator of the National Production Authority and placed in charge of a new Facilities and Construction Bureau in which are centralized all NPA functions relating to building new facilities for industrial expansion and defense construction.

Walter C. Skuce, who directed the Controlled Materials Plan during World War II, has been brought into NPA to take charge of activities which are expected to result in the establishment of a similar plan during the mobilization program.

At the year's end it was becoming more evident that the program is moving into a much tougher phase. One of the final NPA actions of December was to prohibit the use of copper in a long list of products. Generally, the order limits the use of copper to products essential in the mobilization program or to civilian products, such as wire, for which there are no substitutes.

In taking almost complete control over rubber and cobalt, the NPA indicated that the mobilization program was moving into the phase where actions were being taken which were recognized as being harmful to some businesses. Earlier orders, generally, had permitted use of the scarce materials for any and all civilian purposes but had set limited quotas based on previous consumption.

At the present time a number of government agencies are assembling information on the material requirements of the defense and essential civilian production and construction programs under their jurisdiction. This is one step toward the establishment of a controlled materials plan. When all of the information has been assembled, allocations can be made of available production.

The price and wage control programs have not been developed as quickly as production programs. So far mandatory price and wage stabilization regulations have been applied only to the passenger automobile manufacturing industry.

The Economic Stabilization Agency has requested nation wide compliance with a voluntary price control program of holding prices to those prevailing on December 1. Certain exceptions are permitted, but generally the agency has stated that it will regard price increases as justification for action at the earliest feasible time.

The Wage Stabilization Board of the ESA has invited industry and labor leaders to Washington January 10 for a series of conferences on formulation of a national wage stabilization policy.

The Defense Production Act encourages the use of voluntary price and wage stabilization before mandatory controls are imposed. Chairman Ching of the board has announced that as soon as practicable after the conferences, the board expects to submit its recommendations for a national wage policy to the stabilization administrator.

Preliminary plans for the establishment of regional ESA field offices are now being drawn up, but inauguration of general field operations is not expected immediately. The regional offices, at locations chosen in accordance with a general agreement among defense mobilization agencies as to principal field operation headquarters, will be in Boston, New York, Philadelphia, Richmond, Atlanta, Cleveland, Chicago, Minneapolis, Kansas City, Dallas, Denver, San Francisco, and Seattle.

The partial mobilization program started July 19 when the President sent his message to Congress. Impetus was added on December 16 when the President issued his proclamation of a national emergency. All of the indications now are that greater speed will be made in the program the early part of this year.

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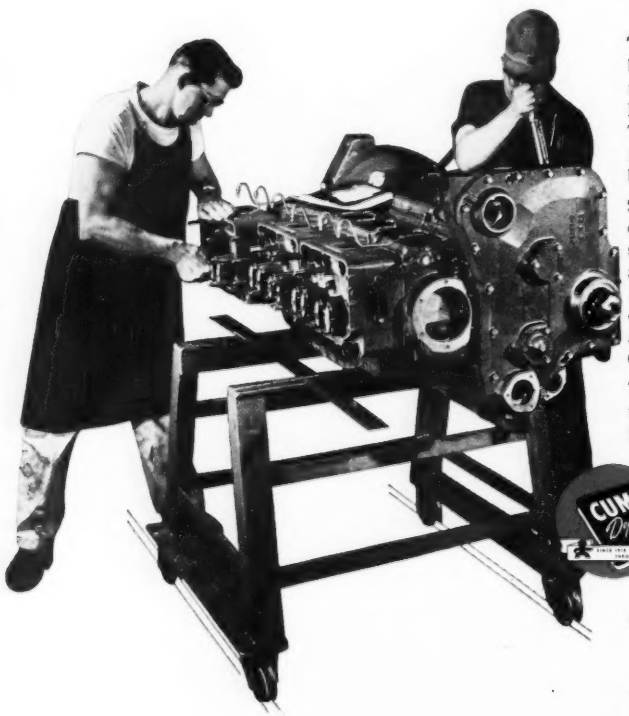

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Lightweight High-speed Diesel Engines (50-550 hp) for: On-highway trucks • off-highway trucks • buses • tractors • earth-movers • shovels • cranes • industrial locomotives • air compressors logging yarders and loaders • drilling rigs • centrifugal pumps generator sets and power units • work boats and pleasure craft.

Bigger Mobilization Program Taking Shape in Emergency

- Frank Creedon Heads NPA Facilities Bureau
- Steps Taken Toward Controlled Material's Plan
- Order Against Hoarding; War Powers Coming

» REVERSES for the United Nations forces in Korea during December sped up the nation's partial mobilization program. Principal developments were:

• The President isued a proclamation on December 16 declaring the existence of a national emergency.

• The same day he established the Office of Defense Mobilization, headed by Charles E. Wilson who resigned as president of the General Electric Company.

• The National Production Authority on December 26 established a new Facilities and Construction Bureau to speed up the industrial expansion needed for defense and to expedite defense construction, headed by Frank R. Creedon.

• The Economic Stabilization Agency on December 19 announced voluntary pricing standards for business for holding prices to those of December 1, and "requesting nation wide compliance to avoid the necessity of further mandatory price controls."

• Chairman Ching of the Wage Stabilization Board on December 28 invited industry and labor leaders to a conference January 10-12 to help draft a national policy for wage stabilization. (Page 26)

• The NPA tightened controls over additional critical materials and took other steps which lead to the establishment in the future of a controlled materials plan by which the use of all materials will be channeled into defense or essential civilian uses.

• Heavier draft calls appeared likely in order to increase the number of men in the armed services quickly from 2,500,000 to 3,500,000.

• Increased spending is in prospect with the President expected to ask for a budget of approximately $75 billion for the fiscal year starting July 1.

Proclamation

The President proclaimed "the existence of a national emergency, which requires that the military, naval, air and civilian defense of this country be strengthened as speedily as possible to the end that we may be able to repel any and all threats against our national security and to fulfill our responsibilities in the efforts being made through the United Nations and otherwise to bring about lasting peace."

The declaration of national emergency gives the President additional authority for the mobilization program, among them the authority to suspend laws relating to the wages and hours of laborers and mechanics on public works projects, and waive the advertising for defense contracts.

At his request, Congress was working on legislation which would restore Title II of the former First War Powers Act, which gives the President the power to authorize any government department or agency involved in the "national defense" to make contracts and changes in contracts "without regard to the provisions of law" relating to contracts "whenever he deems such action would facilitate the prosecution of the national defense."

Defense Mobilization

The day after his radio address to the nation, the President by executive order established the Office of Defense Mobilization. Director Wilson is experienced at such work, having served as executive vice chairman of the War Production Board during World War II. The order states:

"The Director shall on behalf of the President direct, control and coordinate all mobilization activities of the executive branch of the government, including but not limited to production, procurement, manpower, stabilization and transport activities."

Mr. Wilson has stated that some major changes will be made and there will be an increase in the issue of controls after the first of the year.

Construction Bureau

In the establishment of the Facilities and Construction Bureau, all NPA functions relating to building new facilities for industrial expansion and defense construction were centralized in one office.

Frank Creedon

Mr. Creedon has been appointed Assistant Administrator of NPA in charge of the bureau. He is experienced in directing construction programs. During World War II he directed the construction program of ordnance and chemical warfare plants and later became Deputy Rubber Director in charge of construction for the synthetic rubber program.

In 1944 he was construction manager for the atomic bomb plant at Oak Ridge for the Stone and Webster Engineering Corporation. He returned to government as Housing Expediter, and in 1948 the General Electric Company named him construction manager in charge of design and construction of the atomic energy plant at Hanford, Washington.

The five divisions of the bureau which have been established are:

1. Industrial Expansion Division, specifically charged with speeding up the construction of new industrial plants.

2. Tax Amortization Division, which will in cooperation with other agencies recommend issuance of certificates of necessity.

3. Loan Division, which will issue NPA loan certificates authorizing the Reconstruction Finance Corporation to make direct loans when justified and needed to help expand production.

4. Building Materials Division, which will carry out responsibilities for the production and distribution of building materials as required in the defense production program. Heading this division is John L. Haynes, who held a similar position in the WPB, and has more recently been in charge of the Construction Division of the Commerce Department.

5. Construction Controls Division, which will handle NPA activities relating to construction programs and controls. This is headed by James W. Follin, formerly of the General Services Administration.

Mr. Creedon, Mr. Haynes, and Mr. Follin are known by members of The Associated General Contractors of

America, and have addressed conventions in the past.

Controlled Materials

In announcing the appointment of Walter C. Skuce as Staff Assistant to direct the Production Controls Staff Organization, NPA Administrator William H. Harrison stated:

"Mr. Skuce will take charge of current NPA activities leading to the development of a centralized control plan similar to the Controlled Materials Plan that was used during World War II. Work has been going on in NPA for some time to develop a centralized control of this nature as part of the orderly transition from peacetime production to all-out defense production."

In the WPB Mr. Skuce was director of the Controlled Materials Plans Division and Deputy Vice Chairman for Operation.

Late in December the NPA took full control over imports of natural rubber, and the distribution of cobalt. In the near future orders are expected to be issued which will prohibit the use of scarce metals for various non-essential articles, requiring simplification of design for conservation of materials, and requiring substitution of more plentiful materials for critical materials whenever possible.

Late in November the NPA named 19 claimant agencies in the government to report on material needs for programs under their jurisdiction. The agencies are now securing this information. So far, they can only report the needs, and cannot yet secure allocations of materials.

The production of building materials and equipment exceeded all past records during 1950, the Producers Council reported, but will fall well below the new peak in 1951. The Commerce Department in its December survey of current business reported that building materials are the only group of products "for which prices have ceased rising." It stated that the pinch in building supplies is easing.

Hoarding

Hoarding of a wide range of materials important to defense and civilian production was prohibited by NPA Notice 1, issued December 28. The order provides that "no person shall accumulate (1) in excess of the reasonable demands of business, personal or home consumption, or (2) for the purpose of resale at prices in excess of prevailing market prices, materials which have been designated as scarce materials or materials the supply of which would be threatened by such accumulation."

Materials listed include certain building materials, chemicals, iron and steel products and scrap, lumber, plywood, numerous metals and hog bristles. Construction materials listed include cast iron soil and pressure pipe and fittings; gypsum board, sheathing and lath; insulation boards and materials; Portland cement; structural steel shapes, piling and reinforcing bars; softwood and hardwood lumber, rough-sawed, dressed or worked to a pattern; softwood plywood; nearly all forms of aluminum, copper and copper alloys; and construction papers.

Manpower

The Army has asked that 80,000 young men be drafted during March. This is the same number as requested for January and February. During 1950 the largest number called for any one month was 70,000.

Policies and procedures to be followed in the establishment and operation of a countrywide system of regional and area management-labor committees on defense manpower are set forth in Policy Statement No. 1 issued December 29 by the Labor Department's Office of Defense Manpower.

Robert C. Goodwin, executive director of the office, said the policy statement provides for the establishment of 13 regional committees as well as area committees in all labor market areas in which significant manpower shortages exist or impend.

Regional committees, with the Bureau of Employment Security regional director as chairman, will be established in New York, Boston, Richmond, Philadelphia, Atlanta, Cleveland, Chicago, Minneapolis, Kansas City, Dallas, Denver, San Francisco and Seattle.

Military Housing Projects Authorized

- Many Units Planned; Division Engineers Are Contacts

» PLANS and specifications for rental housing projects to be built adjacent to military installations are being prepared under jurisdiction of division officers of the Corps of Engineers. Following is a list of division offices, authorized projects, and number of units. Contractors can contact division offices for information.

South Pacific Division, Sharpe General Depot, 96, Sacramento Signal Depot, 133, Sierra Ordnance Depot, 125, Presidio of San Francisco, 500, all in California. Tooele Ordnance Depot, 25, Dugway Proving Ground, 200, Deseret Chemical Depot, 150, Utah General Depot, 53, all of Utah. Navajo Ordnance Depot, 72, in Arizona.

North Pacific Division, Fort Lewis, 750, in the State of Washington.

Southwestern Division, Fort Worth 568, Red River Arsenal, 55, all in Texas. White Sands Proving Ground, Quartermaster Depot, 30, Fort Hood, 235, in New Mexico.

Missouri River Division, Sioux Ordnance Depot, 100, in Nebraska.

Great Lakes Division, Granite City Engineer Depot, 50, in Illinois.

South Atlantic Division, Redstone Arsenal, 120, Anniston Ordnance Depot, 95, both in Alabama.

North Atlantic Division, Richmond Quartermaster Depot, 16, Fort Eustis, 412, in Virginia. New Cumberland General Depot, 50, Marietta TC Depot, 40, in Pennsylvania. Fort Dix, 300, Fort Monmouth, 600, in New Jersey.

Nation in Dire Need of Technical Talent

» RECOGNIZING the rapidly increasing need for trained engineers in both industry and the military, the Engineers Joint Council Engineering Manpower Commission, composed of representatives of six engineering societies, has recommended the stepping up of technical training in every way possible to meet the anticipated shortage.

To increase engineering colleges enrollment, the EMC favors full time operation to shorten the educational period without reducing the course

content, postponement of induction for those students having good records, and a vigorous campaign in high schools to arouse interest in engineering courses.

The commission proposes the passage by Congress of legislation which will provide for the registration of every man up to age 70 who has a bachelor's degree with a major in one of the critical fields of engineering, or who is enrolled in a program of training leading to a bachelor's or higher degree, or who is employed in one of these fields.

The commission further proposes a National Engineering Personnel Board to review the registrations, establish criteria for a "reserve", classify the registrants and make selections of critical skills for military, civil defense and industrial allocation.

The need for technical personnel is so pressing that the EJC Engineering Manpower Commission believes every effort should be made to reinforce the technical manpower of industry through suitable auxiliary training similar to that of the Engineering, Science, Management War Training Program in World War II.

1950 Volume New Record

Construction volume was the greatest in history during 1950, both physical and dollar-wise, according to year-end estimates of the Department of Commerce's Building Materials Division and the Labor Department's Bureau of Labor Statistics.

The $27,715 million of new construction put in place exceeded 1949's volume by 23 per cent, paced by an all-time boom in housing which accounted for nearly $11.5 billion.

The number of new housing units placed under construction far surpassed any previous year's total. Contract construction employment soared to 2.6 million in August and September, and building materials production broke all previous records.

Building of schools, churches, hospitals and other institutional buildings reached new peaks. Moderate increases in highway construction, reclamation and flood control also brought a new high in those fields.

"Indications are that the physical volume . . . was about 10 per cent above the previous record set in 1927 and at least 15 per cent above the wartime peak in 1942," it was noted.

Industry Plans Record Outlay for 1951 Facility Expansion

• Construction Activity Pattern Changing

» AS 1950 closed on the greatest construction year in history—estimated at $27¾ billion put in place—a different pattern of activity became evident as a result of the nation's stepped up actions to gird for defense.

Residential construction, which boomed at unprecedented levels during the year, accounting for more than two-fifths of total outlays for all types of construction, began declining at a more-than-seasonal rate.

Factory, warehouse, and store building began a marked increase after the outbreak of the Korean war. Industry, which had largely completed its most pressing postwar expansion by 1949, again began expanding. Commercial building, which had lagged behind residential during the immediate postwar years, showed a substantial increase.

In reporting these facts in a year-end announcement, the Departments of Commerce and Labor said the changing pattern was developing "partly as a result of actions taken to prevent inflation and to conserve materials that will be needed for defense purposes, and partly in anticipation of similar further actions that may become necessary."

However, it was evident that snowballing expansion plans of many firms in basic industries are the result of another factor—the need for expanded production to meet defense requirements.

Business is planning to spend a record amount of $21.9 billion in 1951 for new plant and equipment, according to a special survey of business plans made public December 30 by the Securities and Exchange Commission and the Commerce Department. This is about one-fifth higher than the estimated $18.1 billion spent in 1950, and about one-seventh more than during the peak business expansion year of 1948.

About two-thirds of the planned increase in capital outlays for this year is by manufacturing companies. Iron and steel companies plan to about double their 1950 expenditures, and the chemical industry is planning substantial additions.

Railroads and mining companies plan to spend one-fifth more; transportation companies other than railroads, two-fifths more; electric and gas utilities, which already are at a peak in expansion, about seven per cent more; and commercial and other companies, seven per cent more.

The agencies commented:

"Allowing for the rise in capital goods costs during 1950, the physical volume of outlays in 1951 is currently anticipated at one-sixth above actual expenditures in 1950. In view of the tight materials and manpower situation which will result from increasing defense expenditures, there is some question whether this expansion will be fully realized in 1951."

Although the agencies did not say so, it is probable that those industries whose production is considered essential for national defense will receive the necessary priorities to secure the necessary materials.

It became apparent last month that one of the biggest factors in expansion activities of industry will be the accelerated tax amortization extended to those companies whose production is considered essential to defense. Other encouragement also is being offered by the government in the form of guaranteed loans and direct loans, but these aids have not yet become important.

The issuance of necessity certificates for rapid tax write-off to expand defense production facilities, however, has gained great momentum since the first certificates were issued several weeks ago to Jones & Laughlin Steel Corporation for $144 million expansion. (December CONSTRUCTOR, page 25.)

By the end of December, the National Security Resources Board had issued tax amortization certificates for expanded facilities estimated to cost approximately $1.5 billion.

Most of the expansion thus far is planned in the steel industry, with big plants planned by U. S. Steel and Carnegie-Illinois Steel Corporations. Other companies participating manufacture such items as malleable iron castings, barbed wire, precision steel castings, tungsten carbide, liquid oxygen, hydraulic pumps, tanks, fire brick, freight cars and ore handling facilities.

Cost of Living Index Ties With Wages Posing Problem

• ESA Actions Not Yet Directed at Construction

» FOR GENERAL contractors, the wage and price stabilization actions taken by the Economic Stabilization Agency by the first of the year have had only an indirect effect.

The knottiest problem facing the government, and industry and labor, is how to establish workable price ceilings and workable wage and salary stabilization when many wage agreements are tied to the cost of living index.

So far, no immediate steps have been taken leading to the prompt establishment of a wage stabilization board for the construction industry.

By the year-end, one mandatory price ceiling had been established, which froze the manufacturer's price of new passenger automobiles at December 1, 1950 levels until March 1, 1951. Five days later the first mandatory wage and salary stabilization regulation was issued freezing wages, salaries and other compensation in the industry until the same date.

In what was considered a stop-gap, the ESA on December 27 announced pricing standards for business suggesting that prices be held to those of December 1, with some exceptions, and "requesting nation-wide compliance to avoid the necessity of further mandatory price controls."

ESA is assembling a staff to administer a more extensive price and wage control program. Because of the necessity for loyalty investigations, it is a slow process. It is not possible to predict accurately when more price and wage controls will be issued.

Construction Board

Presumably, a conference would be held of government, labor and industry representatives to reach a common understanding before a wage stabilization board for the construction industry were established. By the first of the year no such meeting had been called.

Wage Stabilization Board

Late in December Chairman Cyrus S. Ching, of the over-all Wage Stabilization Board, appointed in November, called a conference of labor and industry leaders to meet January 10-12 to help draft a national policy for wage stabilization.

Ching said that as soon as possible after the conference he expected to submit formal wage recommendations to the economic stabilizer. The conference recommendations probably will be the basis for a general voluntary wage stabilization program which ESA Administrator Valentine is preparing as a follow-up to the program for voluntary price control. The conference also is expected to set a pattern for any mandatory wage controls that may become necessary.

Invited to attend were Marion B. Folsom, Chairman, Committee for Economic Development; William H. Ruffin, president, National Association of Manufacturers; Otto A. Seyferth, president, Chamber of Commerce of the United States; and Herschel Atkinson, president, Council of State Chambers of Commerce.

Labor representatives invited are members of the recently created united labor policy committee: William Green, president, American Federation of Labor; Philip Murray, president, Congress of Industrial Organizations; George Laighty, chairman, Railway Labor Executives Association; and John L. Lewis, president, United Mine Workers.

Recent Labor Cases Affecting Construction

• Decisions Reported Under the Taft-Hartley Law

Circuit Court of Appeals Upholds Constitutionality of Taft-Hartley Ban on Jurisdictional Strikes. The United States Court of Appeals, Ninth Circuit, recently ruled the provisions of Section 8(b)(4)(D) of the Taft-Hartley Law, which prohibits jurisdictional strikes, were a valid exercise of Congressional power to protect the free flow of commerce by confining the area of industrial strife. This case came to the Appellate Court on appeal from a decision by the U. S. District Court of Southern California involving an injunction issued in a jurisdictional dispute between the Machinists' Union and the Millwrights over the installation of steam turbine generators at Redondo Beach, California. The National Labor Relations Board had ruled earlier that the Millwrights' Union (A.F. of L.) was not permitted to strike to force the assignment of the installation work to its members rather than to members of the Machinists' Union. (*Los Angeles Building and Construction Trades Council* v. *Le Baron*—19 Labor Cases 66,088, December 8, 1950.)

U. S. Supreme Court Refuses to Review Case Approving NLRB Procedure in Jurisdictional Dispute Cases. The Circuit Court of Appeals for the District of Columbia ruled in February of this year that the NLRB was not required to "hear and determine" any and all charges of jurisdictional disputes first without making a preliminary investigation. Under Section 10(k) of the Taft-Hartley Act the NLRB is "empowered and directed" to hear and determine jurisdictional disputes *whenever a charge is filed* alleging that Section 8(b)(4)(D), which prohibits jurisdictional strikes, was violated.

In June 1949, the U. S. District Court, District of Columbia, ruled that the NLRB was required to hear and determine a jurisdictional dispute whenever a charge was filed. The Board contended that it had the right to make preliminary investigations in such cases and was not required to hear and determine all charges of jurisdictional disputes prior to such investigation. The Board took an appeal to the U. S. Circuit Court of Appeals for the District of Columbia which ruled with the NLRB and confirmed its policy and procedure of making preliminary investigations in Section 10(k) proceedings prior to formal hearings by the Board. The United States Supreme Court upheld the decision of the U. S. Circuit Court of Appeals with the result that the present NLRB policy and procedure in handling jurisdictional dispute cases is thereby affirmed. (*Parsons* v. *Herzog*—17 Labor Cases 65,610. U. S. Supreme Court Docket 57, October Term, 1950.)

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Defense Appropriation Includes $2.5 Billion for Construction

• Military, Atomic Energy Projects Take Most

» APPROXIMATELY $2.5 billion for defense construction was slated for inclusion in the final version of 2nd Supplemental Appropriation bill on which conferees were attempting to iron out House and Senate differences by January 3.

Money for Army, Navy, and Air Force construction projects amounts to about $1.4 billion. Atomic Energy Commission construction programs in Kentucky and South Carolina will be provided with roughly $1 billion in funds. Other funded construction projects include access roads to military and defense establishments and veterans' hospitals.

This appropriation began with the President's request for $18 billion for emergency defense purposes. The House bill would provide $17.8, and the Senate bill, $20.1 billion.

Military construction funds in the appropriation are to start carrying out $1,658,719,610 of Army, Navy and Air Force projects authorized in another bill (HR 9893) which at press time was awaiting the President's signature.

A breakdown of the authorized military projects follows:

Authorization for Army construction is $390.9 million—$299.3 for projects in the United States, and $91.6 for projects outside the country. Projects are: research and development facilities, $37.6 million; anti-aircraft defense facilities, $50 million; training facilities, $37.3 million; communication facilities, $3.8 million; troop housing, $13.1 million; warehouses and maintenance shops, $92.3 million; finance administration center, $26.2 million; special weapons project, $27.5 million; industrial and port facilities, $8.5 million; advance design, $3 million; supply and supporting facilities, Alaska, including 655 sets of family housing, $28.1 million; temporary construction, Japan, $4.4 million; troop housing, Hawaii, $.9 million; other overseas construction, $57.2 million.

The Navy's construction program amounts to $381,655,310. Authorized construction in the United States totals $327.5 million; outside the country, $54.1 million. Funds for most of the Navy projects were not specified. The projects are: fleet support activities in the Western and Central Pacific, Marine Corps shore establishment, airfield runways and facilities, communication and ordnance facilities, fuel storage tanks and shipyard installations. Funds authorized for construction of 122 family quarters at Inyokern, California, $2 million; for a bridge at Hadlock, Washington, $311,000.

For the Air Force program, $885,604,000 is authorized and $807 million appropriated. Authorized expenditure for continental construction is $451.5 million; outside the United States, $367.2.

Air Force projects are: support facilities, $463.2 million; training facilities, $133.8 million; depots and logistical facilities, $90.1; communication and navigation facilities, $35 million; research, development and test facilities, $22.8; control and warning system, $67 million; classified construction, $20.4 million; other construction, $53.4 million.

Bomb Shelters May Cost $2.25 Billion

• Three-Year Construction Possibility in Civil Defense

» LEGISLATION to establish a Civil Defense Administration and define the unprecedented powers granted the federal government to aid communities stricken or threatened by attack had been agreed upon by conferees and was awaiting final Congressional action at the year's end.

Estimates were reported by the Senate Armed Services Committee that during the next three years $2¼ billion might be spent for the construction of shelters.

It was estimated that over a three year period the whole program would cost the federal government $1,670,000,000 and the states $1,430,000,000.

In order to hold down costs to the government, the legislation will encourage the construction of self-liquidating, dual purpose shelters such as underground garages, subways, and other civil defense facilities such as hospitals which could be built with state and local funds, including private capital.

As agreed upon by the conferees, the legislation would authorize the Reconstruction Finance Corporation to lend up to $250 million for such self-liquidating projects.

Also, the Civil Defense Administrator would be authorized to grant funds to the states to be matched equally by the states for that part of the self-liquidating projects which could be traced directly to civil defense purposes.

A committee official used a hospital as an example. He stated that a municipal group could borrow money from the RFC to cover the normal construction costs. But if it were decided to build extra-thick walls and special ventilators for civil defense purposes, the state could apply for civil defense funds for that part of the construction.

New York City officials announced on December 29 that they are anxious to start construction as soon as possible of extensive subway bomb shelters big enough to shelter a million residents. The shelters could be converted to garages and subways. The Board of Transportation revealed that the $104 million project can be started upon approval of an anticipated federal loan.

The legislation will be effective until June 30, 1954, unless extended by Congress. The Senate committee explained the intent of the legislation as follows:

"In approaching the problem of establishing a national civil defense program it is basic that the program must be implemented at the local level. It is a problem of survival to be solved by the individual, the community, and the state under the guidance and coordination of the federal government. It is not intended that this program will be operated and controlled by the federal government, but rather that the government furnish the necessary guidance and coordination along with certain assistance in financing the program."

War Damage Insurance Law in Prospect

• 82nd Congress Expected to Act; A.G.C. Urges Legislation

» FINAL enactment of legislation to re-establish the War Damage Corporation and to restore war damage insurance as in World War II was expected this month after convening of the 82nd Congress.

A bill had been passed by the House and approved by the Senate Banking and Currency Committee, which would provide Reconstruction Finance Corporation capitalization of $1 billion.

Passage of war damage insurance legislation was urged December 7 by H. E. Foreman, managing director of The Associated General Contractors of America, in a letter addressed to Congressman Brent Spence, chairman of the House Banking and Currency Committee.

Mr. Foreman's letter follows:

"This statement is submitted on behalf of the more than 5,700 members of The Associated General Contractors of America to recommend the passage as soon as possible of legislation to re-create the War Damage Corporation and to restore war damage insurance such as was available during World War II.

"The association represents the leading general contractors from all parts of the country who annually perform the majority of construction undertaken by contract.

"The need for such legislation was discussed by representatives of the association's members at the Mid-Year Meeting of the Governing and Advisory Boards which was held in Chattanooga, Tennessee, September 11-13, 1950.

"A motion was adopted unanimously recommending to Congress that action be taken as soon as possible to make war damage insurance available to property owners and to general contractors.

"We are familiar with H. R. 6982, which was introduced September 15, 1950 by Representative Thomas J. Lane, of Massachusetts. In our opinion, this bill accomplishes the necessary objective.

"War damage insurance, as it was available previously under terms of Public Law 506, of the 77th Congress, Second Session, signed March 27, 1942, was satisfactory to general contractors.

"Under this legislation, the War Damage Corporation underwrote the risk, but used insurance companies for the placement of the policies. This did not require an appropriation by Congress, and the government earned a profit on this activity.

"Such insurance is not now available to property owners or to general contractors. Contractors from many parts of the country have urged that it be made available as soon as possible.

"The legislation which we recommend provides 'reasonable protection' through insurance 'against loss of or damage to property, real and personal, which may result from enemy attack (including any action taken by the military, naval, or air forces of the United States, or its allies in resisting attack), with such general exceptions as the Corporation, with the approval of the President, may deem advisable.'

"It is evident that a general contractor has a substantial investment involved in a construction project before it is completed, accepted by the owner, and paid for in full. There are now several billions of dollars worth of construction projects in varying stages of partial completion. A contractor, without war damage insurance, could suffer heavy losses and be bankrupt if a project were seriously damaged or demolished before completion. The owner also needs the insurance protection both before and after the project is completed.

"At some future time, when planning for the civil defense has progressed further, the committee may wish to give consideration to additional legislation which would include in insurable damage such actions as may be taken by authorized civil defense authorities.

"It is the hope of general contractors throughout the country that the Congress will act promptly on such legislation."

Congress Passes Excess Profits Tax Bill

• Houses Differ in Versions; President to Ask Higher Levies

» THE SENATE and House had passed differing versions of an excess profits tax bill and the measure was awaiting final Congressional action at the year-end.

At an "appropriate" time in the next few weeks the President will send Congress a message asking for an "expanded" and higher tax program to meet mounting defense costs, the White House has announced.

As the excess profits tax bill was passed by the Senate, it set a 77 per cent rate for taxes on earnings classified as excessive by either of two formulas. The primary method would define excess profits as earnings above 85 per cent of a corporation's average annual earnings during its most profitable three years in the four-year period 1946-1949.

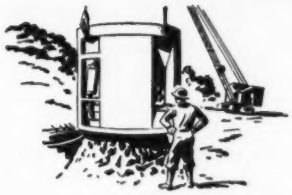
The optional formula would allow returns before taxes of 12 per cent of the first $5 million of invested capital, retained earnings and borrowed capital; 10 per cent on the next $5 million; and 8 per cent on capital above $10 million.

The Senate version set regular corporation taxes at 25 per cent of the first $25,000 of earnings, and 47 per cent on the rest. Corporations earning less than $25,000 would be exempt from excess profits taxes. The Senate version set a maximum of 60 per cent of a corporation's earnings as the maximum to be paid in combined normal and excess profits taxes. The House version had a 67 per cent maximum.

In a statement submitted to the Senate Finance Committee, Managing Director H. E. Foreman of The Associated General Contractors of America stated:

"In order to effectuate, as far as possible, an even distribution of the increase in tax contemplated, consideration should be given to a limitation of tax that will encourage and protect small business. With this aim in view, we recommend that a tax limitation of 38 per cent be placed on the first $100,000 of net profits, that this rate be increased to 45 per cent on the next $150,000, and that on all remaining net profits a tax of 50 per cent be enacted. Under this method the inequities are largely removed and small business is afforded the necessary encouragement and protection."

He also recommended the same exemptions for general contractors which he previously had suggested to the House Ways and Means Committee. (December CONSTRUCTOR, page 31)



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A. G. C. Requested to Sponsor 20 More Army Reserve Units

• Raises Quota to 105 in Affiliation Program

» THE Associated General Contractors of America has been requested by the Department of the Army to sponsor and help train an additional 20 reserve construction units in the Army Affiliation Program.

This raises the association's quota from 85 to 105 units.

Since 1947, when A.G.C. chapters and branches started to sponsor and train these units in cooperation with the Corps of Engineers, 75 units have been sponsored, 70 have been built up to the strength at which they have been placed on the troop list available for call to active duty, and 10 units are now on active duty.

The additional units which A.G.C. chapters are invited to sponsor are the following:

Three Engineer Construction Battalions, at full strength composed of 28 officers, 16 warrant officers, and 869 men.

One Engineer Maintenance and Supply Group, at full strength composed of 26 officers, two warrant officers, and 107 men.

Three Engineer Aviation Battalions, composed of 33 officers and 744 men.

Three Port Construction Companies, composed of seven officers, four warrant officers, 250 men.

Two Engineer Base Maintenance Companies, composed of six officers and 165 men.

One Engineer Maintenance Company, composed of six officers and 185 men.

Three Engineer Light Equipment Companies, composed of four officers and 114 men.

Four Engineer Heavy Equipment Companies, composed of seven officers, one warrant officer, and 242 men.

A.G.C. Units Outstanding

In the Affiliation Program, A.G.C. chapters and branches have cooperated with the Corps of Engineers to sponsor, recruit and help to train reserve Army construction units which can be available for call to duty in time of emergency. Each man is particularly fitted for his military assignment by his civilian employment. The aim has been to select men from members of the chapter so that no one company is depleted too severely when the unit is called to active duty.

In October, Secretary of the Army Frank Pace, Jr., wrote a letter to the A.G.C. sending congratulations on the fine showing which units were making in their field training, adding, "It is quite apparent that they are real Engineer units."

Army's Policy on Military Construction

• Lump Sum Preferred Under Ordinary Circumstances

» INFORMATION on the policy and procedure of the Corps of Engineers in letting contracts for military construction and rehabilitation of World War II facilities has been made available by the Department of the Army.

The Corps of Engineers has again stated its policy of performing all military construction by lump sum contract, let after competitive bidding, except when national security or other compelling reasons necessitate the use of negotiated contracts. Under ordinary circumstances, the vast majority of construction projects are advertised and all interested bidders are given the opportunity to participate. If the present changes in the international situation should cause a greatly expanded military construction program, as is likely, an increase in the number of negotiated lump-sum or cost-plus-a-fixed-fee contracts will undoubtedly become necessary, the announcement declares.

The Corps of Engineers executes its construction programs through a decentralized organization of division engineers and their subordinate district engineers. The district engineers advertise for bids and under most circumstances, the award is made by the division and district engineer without reference to Washington. Negotiated contracts when used are generally negotiated by the division and district engineers. In all cases, the recommendations of the division and district engineers regarding contractors with whom negotiations are to be conducted are given full consideration.

In the fiscal year ending June 30, 1950, $180 million was appropriated for new construction for the Army and $310 million for the Air Force. Some of this construction will be done overseas utilizing indigenous labor and materials. The major part will be executed in continental United States through lump sum contracts. The actual work placement may spread over a two or three year period, but an effort will be made to execute most construction contracts before July 1, 1951. The majority of these contracts will be through formal advertising by district engineers.

The reestablishment or expansion of World War II facilities will be accomplished with a minimum of new construction. In most instances, the work will be done under the jurisdiction of the Commanding General of the six numbered army areas in the United States. Contractors interested in such work should address the inquiry to the Army Commander, marked for the attention of "the Engineer."

In those projects for which the Corps of Engineers has design responsibility, the appropriate district engineer will make selections and recommendations.

Construction contractors or architect-engineers interested in work for the Corps of Engineers should provide information regarding their organization, background and experience to each district engineer having jurisdiction in the area in which the contractor would like to operate. The same information should be furnished to the Engineers marked for the attention of the Assistant Chief of Engineers for Military Construction. If there has been a change in the material already on file, submission of amended information is advisable.

To insure completeness, the Army, Navy and Atomic Energy Commission have revised information forms which are available on application. Contractors are urged to use these forms in submitting new information or revising old data.

Emphasis is placed by the Corps of Engineers on the necessity for contractors making all contacts regarding military construction through the division and district engineers.

SIX LaPLANT-CHOATE MOTOR SCRAPERS

complete a 60 day schedule

IN 39 DAYS!

"On the Malton Airport job in Toronto, we had 60 days to move 426,000 cu. yds. of dirt. Our six LPC Motor Scrapers finished the job in 39 days! We're buying three additional units to help us move dirt faster on future big jobs."

ELGIN ARMSTRONG
Armstrong Bros. Construction
Brampton, Ontario

ON Toronto's Malton Airport project, the six LaPlant-Choate Motor Scrapers owned by Armstrong Bros. Construction *cut schedule time by one third!*

The job called for moving 325,000 cu. yds. of heavy clay over a 1000-ft. one-way haul, and approximately 100,000 cu. yds. over a 4200-ft. one-way haul. On the 1000-ft. haul each Motor Scraper averaged 15 loads per hour with an average pay load of 14 cu. yds. On the 4200-ft. haul each unit averaged 7.9 loads per hour with an average 13.5 cu. yd. pay load. These fast 4 and 7.5 minute cycles are typical of the big production features of the fast-stepping, power-packed LPC Motor Scraper.

Your LPC distributor can show you Motor Scrapers at work. When you call him, ask him to tell you about the new, larger engines—either the Buda 280 h.p. or Cummins 275 h.p. Diesel, that give you more *usable* power and speed for schedule-trimming production. LaPlant-Choate Manufacturing Company, Inc., Cedar Rapids, Iowa—LaPlant-Choate Sales and Service, 1022 77th Ave., Oakland, Calif.

LaPLANT CHOATE

Cable-operated Scrapers in 6-, 8- and 14-yd. sizes for all makes of track-type tractors.

2- and 4-yd. Scrapers for track-type and rubber-tired industrial tractors.

Hydraulic and Cable-operated Dozers.

Problems of Emergency Period to Occupy A.G.C. Convention

• Mobilization Officials to Address Boston Conclave

» THE PROBLEMS which general contractors face during a sustained period of partial mobilization, or another war, will be thoroughly explored at the 32nd annual convention of The Associated General Contractors of America.

The convention will be held February 26 to March 1 in Boston. The headquarters will be in the Statler Hotel. Some of the state groups will have rooms in the Copley-Plaza.

Executives in charge of important parts of the mobilization, and other outstanding men, will address the sessions.

The opportunity will be afforded to all members to take part in the discussions of problems affecting their businesses and to vote on actions of the convention. Discussions will be held not only on the convention floor but also in the meetings of the building, highway and heavy construction divisions. Time has been set aside for two afternoon meetings of each group.

Committee meetings will start on Friday, February 23, with a meeting of the recently formed national joint cooperative committee of the A.G.C. and the insurance companies writing workmen's compensation policies. A number of A.G.C. committees will meet Saturday and Sunday before the convention sessions start.

Although this will be primarily a working meeting, the convention committee under the chairmanship of Moses Slotnik is planning an excellent program of entertainment for both men and women.

Host for the convention is The Associated General Contractors of Massachusetts. By late December 700 reservations had been received from members in 65 chapters.

Schedule of Events

The schedule of events from Friday, February 23, through Thursday, March 1, is as follows:

Friday
- Afternoon
  - A.G.C.-Workmen's Compensation Insurance Carriers Joint Cooperative Committee

Saturday
- Morning
  - Labor Committee
  - Accident Prevention Committee
- Afternoon
  - Labor Committee
  - Finance Committee

Sunday
- Morning
  - Apprenticeship Committee
  - Contract Forms and Specifications Committee
  - Legislative Committee
  - Public Relations Committee
  - A.G.C. Secretaries' and Managers' Council
- Afternoon
  - Executive Committee
  - Market Development Committee
  - A.G.C. Secretaries' and Managers' Council-Building and Highway-Heavy Sections
- Evening
  - Boston Pops Concert—with Arthur Fiedler

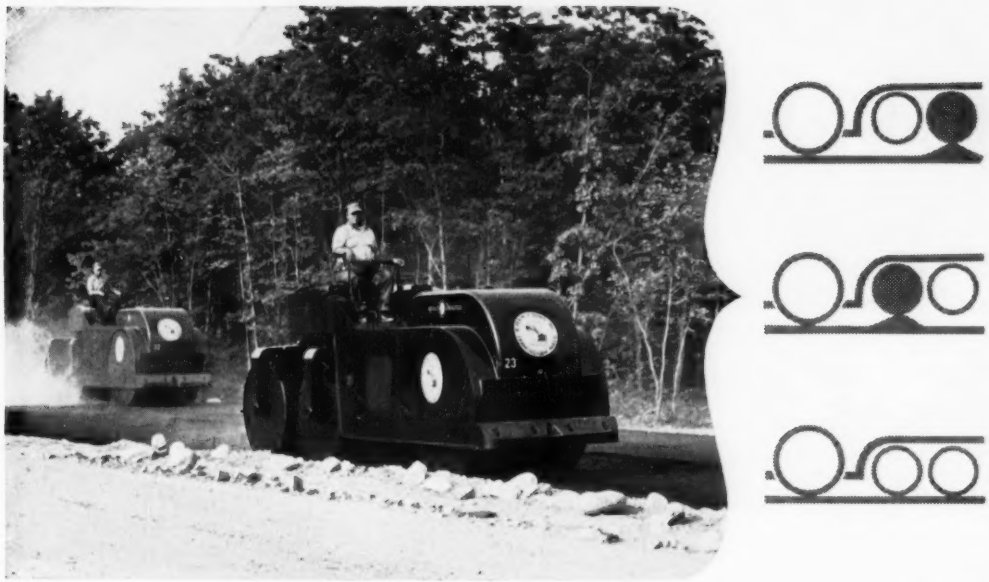
Monday
- Breakfast
  - Membership Committee
- Morning
  - Governing and Advisory Boards
- Afternoon
  - Opening General Convention Session
- Evening
  - Reception, Dinner, Dancing

Tuesday
- Breakfast
  - Chapter Presidents
  - National Association of State Aviation Officials—A.G.C. Joint Cooperative Committee
- Morning
  - General Convention Session
  - Ladies' Luncheon
- Afternoon
  - Division Meetings: Building; Highway; Heavy and Railroad

Wednesday
- Breakfast
  - Fathers' and Sons'
- Morning
  - General Convention Session
- Afternoon
  - Division Meetings: Building; Highway; Heavy and Railroad

Thursday
- Morning
  - Concluding General Convention Session
- Afternoon
  - Governing Board Meeting
- Evening
  - Annual Banquet, Dancing

The Massachusetts State House in Boston



What is 3-AXLE SMOOTHNESS?

The answer to this question is a matter of record. By actual test, it is the highest degree of road surface smoothness ever attained with tandem roller. A leading state highway department proved that the Buffalo-Springfield 3-axle tandem produces surfaces 50% smoother than the average obtained with conventional tandems of equal capacity. Also noteworthy, the same test showed that the 3-axle tandem averaged 60% more tonnage compacted than other units on the project. As a result, the specifications for asphaltic surfaces in this state now permit the use of one less tandem roller with each spreader, *provided* a 3-axle tandem is one of the rollers employed.

Still another state specifically requires the use of a 3-axle tandem on certain plant mix surfaces.

There's a reason for this greater work capacity and smoother rolling results. The two large diameter guide rolls and the drive roll of the 3-axle tandem are rigidly mounted in a position tangent to the same plane. Thus, when one guide roll strikes a high spot in the pavement, the other is lifted clear of the surface and its weight transferred to the rolls retaining surface contact. Result — maximum compactive effort where it is needed most — on the high spots in the surface.

You can learn more about this transfer-of-weight principle and the many other exclusive features of the Buffalo-Springfield Model KX-25, 12 to 19 ton, 3-axle tandem from your nearest distributor. Why not call him today?

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☐ Please send me Catalogue S-56-49 describing the right model for my requirements. ☐ Notify Distributor to call.

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GUTS

When two-legged people have guts, they finish the fight and do the job.

Real guts—that's what the world admires—man or machine.

You can't define what makes guts in a man, but you can "analyze" the fighting, working, dogged innards of the Champ. So let's put the X-ray on the TD-24:

Drawbar Horsepower: 148 working horsepower delivered at the drawbar in official tests.

Synchromesh Transmission: you "shift on-the-go," with eight speeds forward, eight reverse for faster time cycles with more pay dirt per cycle.

Instant Speed Change: up or down one speed without declutching.

Planet Power Steering: all turns are easier . . . pivot turns, feathered turns, turns with power on both tracks.

Reserve Torque: gives the Champ the lugging ability to fight through temporary overloads.

Easy Steering: finger-tip hydraulic controls.

All-Weather Starting: push-button, gasoline-conversion starting—an International exclusive—gets you on the job fast.

More Work: the TD-24 is doing more work—with more speed and more lugging ability—than any other crawler tractor on the market.

Look it over. Then ask your International Industrial Distributor to show you what it can do for you. You'll be a TD-24 man from then on in.

INTERNATIONAL HARVESTER COMPANY
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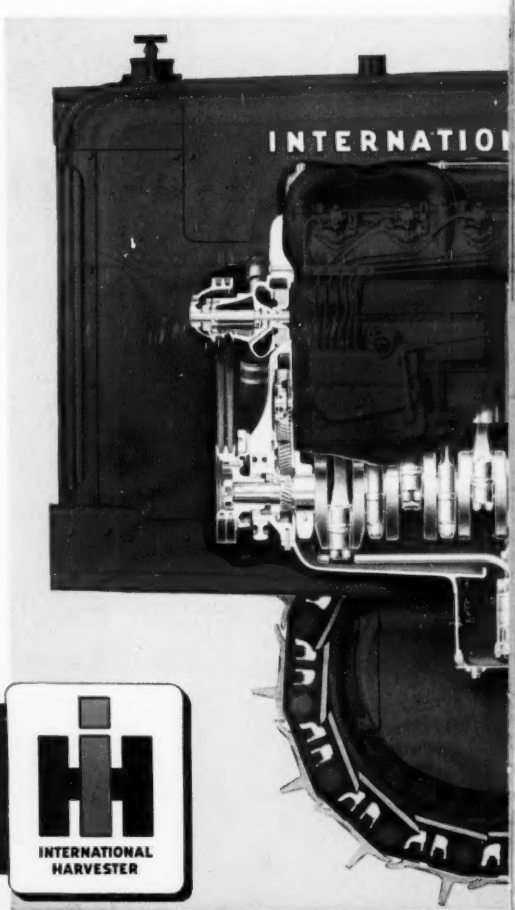

POWER THAT PAYS

INTERNATIONAL

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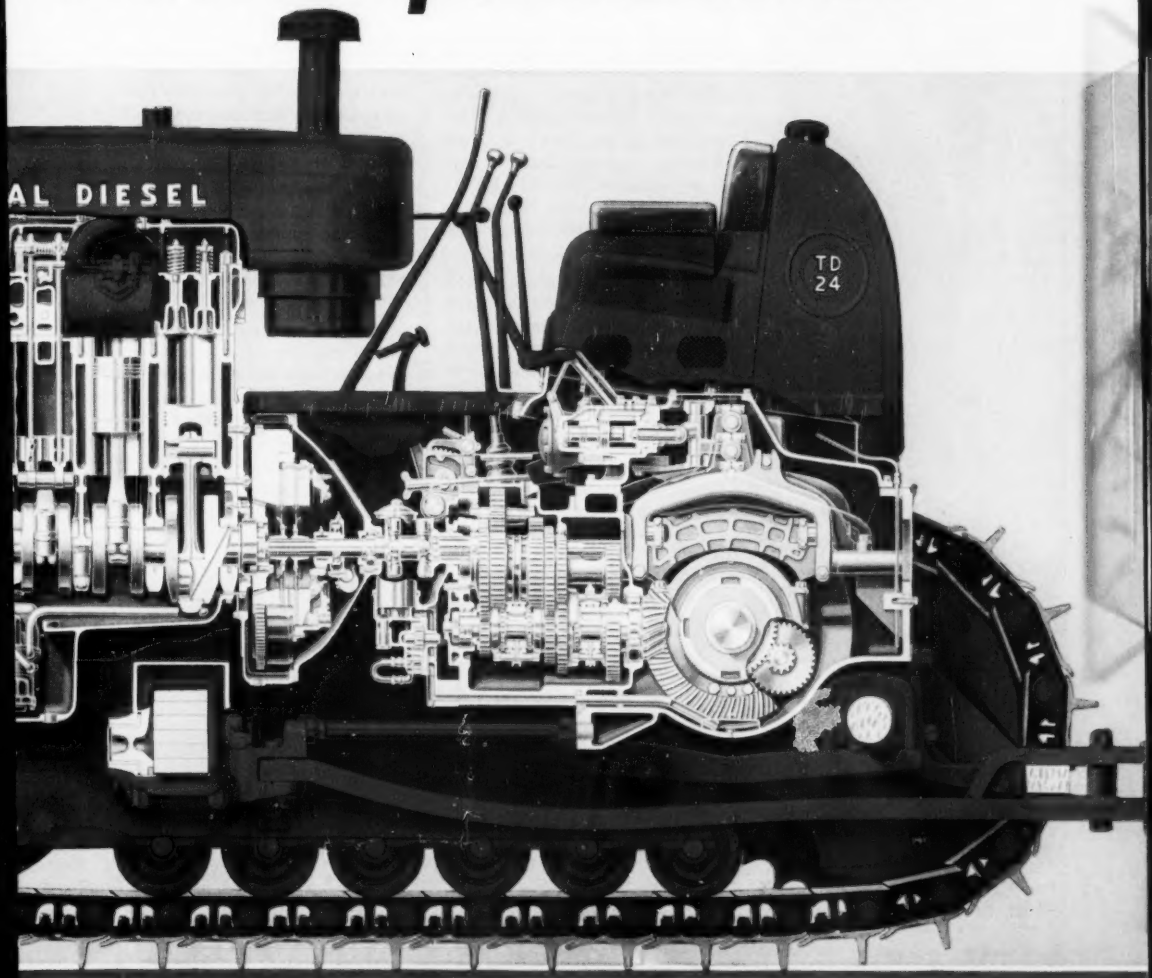
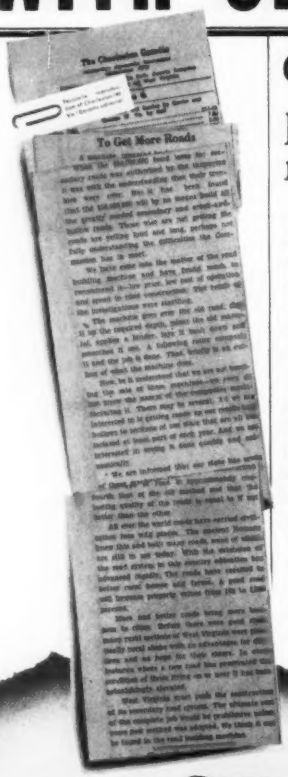
OF A CHAMP

inside story of the TD 24



WEST VIRGINIA SOLVING ROAD BUDGET PROBLEM WITH SEAMAN MIXERS!


The Charleston Gazette

To Get More Roads

Charleston Gazette in editorial points to Seaman as answer to road system extension . . .

The Charleston Gazette, quite properly, does not mention the SEAMAN by name, calling it only a "road-building machine," but the story is about seven SEAMAN MIXERS now in use by West Virginia. In part, here's what the Gazette says:

"Here is an answer to the prayers of those dwellers in West Virginia hills who are harassed by their inability to get in and out the greater part of the year. Our many miles of dirt roads — often no better than mud roads — are the cause of continual complaints . . .

"We have gone into the matter of the road building machine and have found much to recommend it — low price, low cost of operation and speed in road construction. The result of the investigation was startling.

"The machine goes over the old road . . . mixes the old material and applies a binder, lays it back down and smoothes it out. A following roller compacts it and the job is done.

" . . . It is stated that the cost of construction of this type of road is approximately one-fourth that of the old method . . ." West Virginia's experience with the SEAMAN MIXER is duplicated the country over. The SEAMAN *is by far the best answer* to high quality, low cost stabilized roads.

The SEAMAN SELF-PROPELLED MIXER 7 ft. mixing width. Gasoline or Diesel powered.

The SEAMAN SELF-PROPELLED TRAV-L-PLANT. Like the Self-Propelled Mixer except for addition of spray bar, pump, pump tachometer fifth wheel assembly and meter for precision control of bitumen or water application. 7 ft. mixing width. Gasoline or diesel powered.

Here's a Bulletin describing the SEAMAN Self-Propelled Mixer and the TRAV-L-PLANT. Sent to you FREE on request. Ask for "Self-Propelled Bulletin."

SEAMAN MOTORS, INC.

Requirements for Defense vs. Municipal Public Works

- Capacity Adequate for Urgent Projects

(Address by A.G.C. Managing Director H. E. Foreman Before American Municipal Congress Dec. 5, 1950)

» THE FIRST point which should be established in discussing the mobilization program and municipal public works is that no positive answers can be given to most of the questions which you as mayors have in your minds.

The purpose of the nation's partial mobilization program is to resist armed aggression with force wherever it may break out in the world. It has been gaining in momentum steadily since July. The full impact has not yet been felt. The ultimate size of the program will depend on war developments, on our military and foreign policies to a large extent.

No one can foresee the future accurately enough to state positively what is likely to happen.

For this reason, my purpose will be to discuss the factors which have a bearing on some of the questions regarding municipal public works which you will have to decide for your respective communities.

My guess is that you are wondering what kinds of projects you can go ahead with and what chance you have of completing them; about the availability of materials and labor; about the costs of construction; and whether or not you should plan to go ahead with projects now and in the near future.

In addition, I would like to make a few suggestions on civil defense planning.

The first question involves steps which have been and may be taken by the federal government to prohibit the commencement of types of construction projects.

As you know, the National Production Authority issued its Order M-4 on October 27 and amended and clarified it on October 31 and November 15. This order prohibits the commencement of publicly and privately financed construction projects for amusement, entertainment and recreational purposes.

NPA officials have suggested that a careful reading of the order and its amendments will reveal that it is not as drastic as it may appear at first. They point out that maintenance and repair are not prohibited. Substantial amounts of reconstruction can be undertaken, so long as the basic design of the structure is not altered.

Many small projects can be undertaken where the construction cost does not exceed $5,000. Grading and landscaping is not considered a part of construction, so that, for example, work costing far more than $5,000 could be undertaken on a playground so long as the actual construction cost did not exceed that figure.

Summary of Address

1. So long as there is a partial mobilization program, and unless there is a war of such major proportion that extreme measures must be taken, essential municipal construction can be undertaken and completed.
2. There will be adequate materials and manpower for the completion of essential municipal projects, with some local and temporary difficulties to be encountered. The allocation of materials to construction purposes under a controlled materials plan will make it easier to the industry to fill essential needs.
3. The construction industry has the capacity to carry out efficiently all essential public works projects.
4. Construction costs will share the tendency to inch upwards with the costs for other services and commodities, but will be in line with other costs.
5. The urgency of its need and the availability of funds probably will be the determining factors on whether projects should be started now. There is no way of foreseeing when conditions will be more favorable for undertaking public works construction.
6. Leaders in the construction industry will take intense pride in their willingness and ability to organize the industry for most effective service in the civil defense program.

Of more importance is paragraph 71.10 of the order which provides for relief in the event of unreasonable hardship. NPA explains that it is not their policy to prohibit construction for the named purposes where it will cause unreasonable hardships for communities, and they will give consideration to cases which clearly set forth the hardships.

The M-4 order presumably establishes the pattern for such action as may be found necessary in the future to limit the commencement of other types of construction. At the present time no answer can be given as to what further types of projects will be restricted, or when such action may be taken.

Based on the experiences of World War II, it is reasonable to assume that essential municipal projects such as schools, hospitals, water works, and sewers and streets would be among the last to be curtailed if further restrictive action becomes necessary because of war developments.

No answer can be given now to the question of whether or not at some future time it will be necessary to file an application and secure NPA permission to undertake any construction project. NPA is not now staffed to handle such work, and it will be some months before it could have that staff.

The policy of NPA is to prohibit the commencement of projects, and not to halt projects which are already under way. That policy apparently will prevail unless, of course, the nation should become involved in a war of such magnitude that such steps would become necessary.

Availability of Materials

Another of your questions undoubtedly is about the availability of materials to complete projects.

The production of most construction materials has been at a high rate in recent years. Shortages in various areas have been caused by a combination of circumstances including a high rate of construction activity, strikes

in local plants, transportation difficulties, and in some cases by sellers holding back their supplies for higher prices.

The volume of defense construction from federal appropriations which have been made will amount to less than ten per cent of the current volume of new construction. Future appropriations may increase this amount. But for the present and near future, defense construction probably will not be a major factor in the consumption of materials.

Generally, it is safe to predict that there will be sufficient materials for the construction of needed municipal construction. Some communities may encounter more difficulties than others in securing prompt deliveries, however.

The present priorities system provides that Defense Order, or DO, ratings can be assigned for authorized procurement and construction programs of military agencies and the Atomic Energy Commission. These ratings give precedence to these particular orders.

The question has arisen as to whether or not the NPA will make provision for DO ratings for essential municipal projects, such as badly needed water systems. For the present, the policy of NPA has been to limit the DO ratings to military production or construction.

If the mobilization program continues to expand and the war becomes more serious, it is likely that a controlled materials plan will be adopted. This would provide for the allocation of basic materials to essential needs.

Based upon the experiences of the last war, it is reasonable to assume that in a controlled materials plan there would be an allocation of materials to essential municipal public works projects.

Late in November the Commerce Department designated 19 federal agencies as claimant agencies to present to the Department the requirements with respect to materials and facilities for various programs coming under the jurisdiction of these agencies.

Thus the Bureau of Public Roads becomes the agency to present the requirements of materials for all highway construction and maintenance, including urban streets constructed with or without federal aid. Others designated as claimant agencies for presentation of requirements were the Secretary of Interior for petroleum, gas, solid fuels and electric power; the Federal Security Agency for school and hospital construction and the domestic distribution of supplies and equipment needed in the fields of health, education, welfare and recreation; the Housing and Home Finance Agency for all housing construction, alteration and repair, and state and local community facilities.

If it is to be interpreted that the designation of these claimant agencies is a step toward the adoption of a controlled materials plan, and that when a plan is adopted these 19 agencies would have allocations of materials for the programs under their jurisdiction, the construction industry would be able to complete essential projects more easily than was possible during the last war when there were practically no provisions for the allocation of materials for construction purposes directly.

It should be pointed out, however, that so far there is no machinery for claimant agencies to secure allocations of materials.

Availability of Labor

Another of your questions probably is on the availability of workmen to complete public works projects.

That can be answered this way. There have been times when it was almost possible to prove statistically that there were not enough workmen to execute all the work which was in sight. But the fact is that the construction industry always has found some way to man the job and complete the work.

It might be well to cite here the fact that last week the Bureau of Labor Statistics reported that during October the cost of living had reached an all-time high, and that as a result nearly a million workers whose wages were tied to the rise and fall of the BLS index received wage increases.

Construction Costs

As mayors you are vitally and properly concerned with construction costs. On this subject you should be realistic.

There is the steady pressure for wage increases. These bring about price increases.

Whether or not, or when, there will be wage and price controls is a question on which your guess is as good as any other person's.

Before the invasion of South Korea the outstanding characteristic of the construction industry was the intense competition which was prevailing. General contractors described it in varying terms up to suicidal. The importance of this to you was that this competition had forced costs in the industry to the minimum. Bid prices had been forced so low in many instances that contractors were going broke.

Since July there has been steady pressure for increased wages and higher materials prices. Competition remains keen, but with present uncertainties contractors are forced to be more cautious in their bidding to avoid bankruptcy.

With respect to the costs of your public works projects, I would like to make two suggestions. First is that if you are concerned about a project, consult your local group of general contractors before you call for bids. There are 112 local chapters of The Associated General Contractors of America throughout the country who are accustomed to giving straightforward advice based upon their knowledge to those anticipating the award of contracts. They may be very helpful to you in making suggestions which will enable you to hold your costs to a minimum on the project.

Second is that you award one general contract for the project to an experienced and competent general contractor. You will find that when the general contractor has the undivided responsibility, you will get the best possible project for the lowest possible cost.

Throughout the years the cost of construction has followed closely the general price trend of all services and commodities. There appear to be no reasons why construction costs will not continue to be in line with others.

Time to Go Ahead

Each one of you undoubtedly is wondering when you should proceed with various projects in your respective communities.

That is a question which you will have to answer for yourselves, based upon the best advice obtainable in your community. You will be influenced by the urgency of the need for each project and by the available funds.

The construction industry now can undertake and carry out efficiently all essential construction. Some difficulties may be encountered in various communities in securing materials promptly, but there is the industrial

(Continued on Page 42)

BETTER BUY... NORTHWEST!

Here is but a part of the list of advantages that Northwest has for you — a list of advantages that puts Northwest far in the lead from the stand point of low upkeep cost, ease of maintenance and high output.

They deliver the satisfaction that makes the Northwest the best for the heart of the job. Plan now to have one. Let us tell you more about why one out of every three Northwests sold is a repeat order.

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Cast Steel Bases with Cast Steel Machinery Side Frames...Plenty of strength — maintains shaft alignment

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Ball or Roller Bearings on All High Speed Shafts...Minimum loss of power to friction

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Northwest Dual Independent Shovel Crowd...Utilizes force other independent crowd shovels waste

Positive Traction while turning as well as when going straight ahead gives the larger Northwest the ability to travel where other types of crawlers have difficulty.

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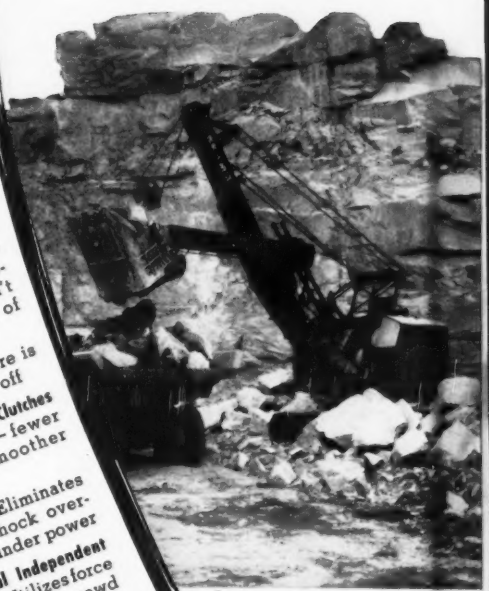

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MAKE YOUR KEY MACHINE A REAL ROCK SHOVEL PROFIT

NORTHWEST

CRAWLER and TRUCK MOUNTED SHOVELS • CRANES • DRAGLINES • PULLSHOVELS

(Continued from Page 40)

capacity to complete all essential projects.

The A.G.C. chapter in your area and the leading contractors there will know the situation which prevails in your community and will be able to give you sound advice.

In response to the question of whether or not now is the time to proceed with urgently needed projects, I would like to pose this question: Can you foresee a time when conditions will be more favorable?

Civil Defense

Although your luncheon session tomorrow will be devoted to the subject of municipal responsibilities for civil defense, I would like to discuss that subject briefly.

In the event of bombings or other disasters, the services of general contractors and others in the construction industry will be of invaluable service to the community in clearing wreckage, repairing damage, and restoring essential facilities to use.

The A.G.C. has given considerable study to this subject in response to an assignment from the National Security Resources Board to help in the planning and organization of the services of the construction industry for the civil defense program.

By reason of the fact that the general contractor is the primary organizing force in the construction industry, we have recommended that in each community the civil defense authorities ask the contractors in the area to recommend a contractor of outstanding engineering and executive ability to selection as the coordinator of all privately operated construction forces in that area.

The coordinator and his deputies and assistants, by their intimate knowledge of all parts of the industry in the area, will be able to plan how to make most effective use of the management, manpower, machinery and materials of the industry for the work which must be done.

We believe that when outstanding men in the industry in your area are given the assignment to use their knowledge of the industry to plan how the various organizations can be kept intact to work as parts of a team in the manner in which they are accustomed to operate, you will have the most effective engineering and construction civil defense organization.

Municipal Congress Debates Civil Defense

• City Officials Deal with Federal-State-Local Relations

» MUNICIPAL problems, and the relationships of federal, state and local governments, were thoroughly discussed at the 1950 Congress held by the American Municipal Association in Washington, December 3 to 6.

Public works construction problems were discussed by H. E. Foreman, Managing Director of The Associated General Contractors of America. (Text of his address starts on page 39.)

Civil defense was a much debated subject at the Congress and in Washington at the time. The AMA adopted a resolution urging that the new Civil Defense Administration be transferred to the Department of Defense so that it could hold equal standing with military, naval and air force phases of the national defense.

It also recommended that there be direct federal-municipal relationships, rather than requiring that municipalities deal with the federal agency through state agencies. . AMA representatives presented their recommendations to a Senate committee holding hearings at that time on legislation to create a permanent CDA.

In other resolutions, the AMA recommended that federal officials consult with appropriate city officials before any bomb shelter construction program is started; urged the National Production Authority to provide exceptions to its ban on the start of recreational construction projects to meet recreational needs of defense workers and military personnel; and adopted a lengthy statement on highway, traffic and parking problems.

New Criteria Govern Planning Advances

• $627.5 Million of Non-Federal Public Works Approved

» MORE than $18 million in federal funds had been loaned by December 1 to communities to prepare advance plans for 1,038 non-federal public works projects which will cost more than $627.5 million.

These facts were reported to Administrator Raymond M. Foley of the Housing and Home Finance Agency by Pere F. Seward, Commissioner of the Community Facilities Service which administers the Second Advance Planning Program.

Applications are now under review for advances of $24 million to plan an additional 877 projects to cost an estimated $945 million. Of these, 356 are for school projects, and 219 for sewer works. Previously sewage projects had led the list.

In October new criteria were established for approval of projects in the program. To be eligible for advances for planning, projects now must be directly helpful to the defense program, or be for essential and immediate civilian needs.

The second program was activated in October 1949 with an authorization of $100 million. The first program was authorized in 1944. Under that nearly 7,000 projects for all types of community public works throughout the country were planned in advance.

Planning Advances Approved

Types	Number	Total Cost	Advances
Highways, Roads, Streets	50	$14,582,000	$492,000
Bridges, Viaducts, etc.	30	19,254,000	596,000
Airports	4	4,767,000	125,000
Sewer Facilities	393	248,378,000	6,697,000
Water Facilities	122	43,785,000	1,409,000
Sanitary Facilities	12	4,306,000	175,000
Schools, Other Education	314	166,559,000	5,496,000
Hospitals, Health Facilities	13	19,048,000	467,000
Other Public Buildings	55	77,141,000	2,010,000
Parks and Recreational	29	9,299,000	294,000
Miscellaneous	16	27,469,000	512,000

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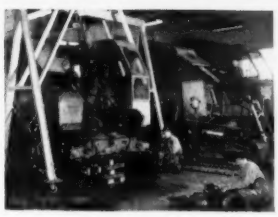
Link-Belt Speeder distributors give you on-the-job service—never let you down when time really counts.



In modern shops like this, factory-trained servicemen of your Link-Belt Speeder distributors give you fast, complete service.

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Jan. 1951

Highway Departments Are Urged To Survey Their Requirements

- Looming Control Makes Needs Study Vital
- Fleming Explains Defense Transport Policy
- States and A.G.C. Act as Public Relations Team

» IMMEDIATE and comprehensive action by state and municipal highway departments in surveying their requirements of materials for all highway construction and maintenance in the light of impending controls was urged by Thomas H. MacDonald, commissioner of the Bureau of Public Roads, in addressing the 36th annual convention of the American Association of State Highway Officials in Miami, Florida, last month.

Gen. Anderson, new A.A.S.H.O. head

Speaking as head of the claimant agency designated to present to the Department of Commerce all highway materials requirements, Commissioner MacDonald emphasized the importance of determining whether projects could be held in service for 10 years through maintenance, or if reconstruction is required, of providing priorities for the most essential services first.

"This means an intensive continuing highway planning operation in each state, with the first duty an inventory of condition and traffic service required," he said. "The governing rule that as a matter of responsible public service must be applied by every highway official, is to direct the funds, the materials, equipment and contractors' organizations available into the program of construction projects selected on the basis of accurate knowledge of the service they must perform, of their condition, their cost of replacement, and the amounts of critical materials required."

Mr. MacDonald at that time did not know what controls might necessarily be imposed, but said he was aware that some materials, particularly steel, will be in short supply.

"Fortunately, the road program does not require the more critical items, and there should be sufficient steel available, since so limited a percentage of our total output is required," he continued. He warned the highway departments that the Bureau of Public Roads, as the claimant agency, "expected to discharge its responsibility with vigor and dispatch."

In addition to alerting the highway departments to the pressing need for estimating their materials requirements, Commissioner MacDonald condemned two policies characteristic of the war period—inclusion of highways in the order to cease construction unless certified by control authority, and the disregard of state legal load limits in military hauling. "It is important that policies to be adopted now shall be adjusted to existing conditions," he declared.

The A.A.S.H.O. by resolution, tendered the services and facilities of the several state highway departments to the Secretary of Commerce to assist the Commissioner of Public Roads in achieving his objectives.

While no policy for handling counties and municipalities has been worked out, it is believed that their requirements will be handled through the state highway departments.

A.A.S.H.O. Resolutions

Resolutions passed by the association: (1) called federal and state attention to the pressing need for continuing an accelerated program of construction and maintenance; (2) offered services of state highway departments to the Commissioner of Public Roads as the claimant agency in all highway construction and maintenance; (3) urged the expediting of the Interstate Highway System; (4) pledged continued support to the President's Highway Safety Program; (5) urged promotion and encouragement of studies of the effect of heavy truck loading on pavements; and (6) commended the Secretary of Defense for imposing size and weight limitations on motor vehicles carrying military cargo. Other resolutions memorialized the services of the Honorable Will H. Whittington (D. Miss.) to the cause of American highways, and of the retiring A.A.S.H.O. president, DeWitt C. Greer to the organization.

Fleming Explains System

"Our highway transport system plays such an indispensable role that it can not be divorced from any phase of the emergency effort. . . . A war economy will require that the highways be kept in as good shape as the railroads and other transportation media," declared Major General Philip B. Fleming, Under Secretary of Commerce for Transportation, who also spoke on the A.A.S.H.O. program.

General Fleming, head of the newly created Transportation Council, announced that the Secretary of Commerce had assigned to this agency the responsibility of providing staff assistance to William H. Harrison, Administrator of the National Production Authority for "considering transportation problems and the material requirements thereof." He said he would have as his deputy the chairman of a subcommittee made up of representatives of the Department of Defense, Department of the Interior, Defense Transport Administration, Maritime Administration, Civil Aeronautics Administration, Civil Aeronautics Board, National Advisory Committee for Aeronautics and the Bureau of Public Roads.

"Requirement estimates of each agency will be brought to this subcommittee and discussed thoroughly," the general said. "My staff will attempt to harmonize the estimates, and fit them together into a total transportation program." General Fleming went on to explain that if no agreement could be reached, he would attempt to resolve them himself so that a program to which all could subscribe might be submitted to Mr. Harrison.

"If any claimant feels that he has been unjustly treated, that claimant

can appeal over my head, and if necessary over the head of General Harrison. There will be no star chamber proceedings. . . . Each claimant gets a fair hearing and all possible help from my staff," the speaker declared.

General Fleming urged the highway officials to make the best possible use of the scarce materials they were able to secure. He suggested that redesigning, reduction or elimination of critical materials should be the order of the day. "You will make these scarce materials go as far as possible as is consistent with safeguarding necessary highway transportation."

The head of the Transportation Council made it plain that the set-up at present was in a preliminary or formative stage and that it was unprepared to supply materials to claimants who might be in need of such materials. A considerable staff will be necessary to handle the avalanche of requisitions and this is still to be organized.

He said, "In the current situation, defense needs and civilian requirements must be carefully meshed. It is an open secret that during the last war there was a general tendency to regard our highways as expendable. From present indications we are going to take a longer, and I think more constructive, view during the emergency period that lies ahead—particularly since no one can predict its duration," General Fleming concluded.

Public Relations Story Told

Better public relations for the improvement and maintenance of our highways was the subject of an address by A. N. Carter, manager, Highway Contractors' Division of The Associated General Contractors of America. His remarks were pointed up by exhibits of what various highway departments are doing to solve this important problem. In the working out of publicity programs, chapters of the Associated General Contractors are cooperating with the highway departments, he said. A notable example of this teamwork is found in Oklahoma where the A.G.C. chapter broadcasts the bids at each highway letting and describes the operations of the state highway commission to the public.

Missouri and North Carolina are further instances of cooperation between the highway departments and A.G.C. chapters in public relations efforts. Iowa and California are also doing excellent jobs in this field, the speaker announced.

The A.G.C. official commended the use of signs on the New Jersey Turnpike, and the use of leaflets in Minnesota and Colorado. Texas also uses printed slips to explain the paving operation to motorists, and this brings results in protecting freshly paved surfaces and reducing complaints about flying gravel and gummed-up cars. Texas has also introduced information booths which find favor with the motoring public.

Virginia is making effective use of booklets on highways which are approved by the state board of education for classroom use throughout the commonwealth. Pennsylvania is employing movies with sound tracks to acquaint the public with highway finance and other problems. Maryland has had its highway movies televised, one of the first instances where this medium has been utilized.

Maine and Minnesota are among the states cited by Mr. Carter for models which show the over-all or specific highway problem. Permitting the people to see actually how the particular bridge or highway will look is a most effective way of securing public support, he declared.

Name Officers for 1951

General J. A. Anderson, Virginia highway commissioner, was elected president of the A.A.S.H.O. for 1951. Bertram D. Tallamy, New York superintendent of public works, was chosen first vice president.

Regional vice presidents are: First District — Ray Smock, secretary, Pennsylvania State Highway Department; Second District, A. E. Johnson, chief engineer, Arkansas Highway Department; Third District, Theodore J. Kauer, Ohio director of highways; and Fourth District, J. R. Bromley, chief administrative officer, Wyoming Highway Department.

G. H. Henderson, principal highway engineer of Rhode Island, was retained as treasurer. Hal Hale of Washington, D. C., is executive secretary.

Must Improve Roads, Committee Holds

• A.A.S.H.O. and A.G.C. Joint Conference for 10-Year Plan

» DISCUSSION of how the present volume of road building can be maintained, means of securing materials for highway construction, use of termination clauses, conservation of critical items, freight rate adjustments and other timely subjects were considered by the Joint Cooperative Committee of the American Association of State Highway Officials and The Associated General Contractors of America, Inc. at a meeting, December 2, 1950. The conference was held in Miami, Florida, as part of the A.A.S.H.O.'s 36th annual convention.

The conferees agreed that the improvement of the nation's highways must continue and advocated a ten-year program with an annual volume of not less than that of the current year. This stand was based on the fact that highways are more obsolete than they were in 1940 and indicate a steady loss of ground.

In order to secure adequate materials, the joint committee favors the awarding of as much work as possible at once. This would permit contractors to order the necessary supplies now and secure commitments as to delivery dates.

All highway departments should seriously study the use of termination clauses in construction contracts. Several states are already using them and others have them under consideration. Their major aims would be: (1) to make it legal to cancel contracts if war conditions indicate; and (2) to provide that the termination be fair and equitable to all parties. Use of such a clause should result in securing better bids and be important in controlling price trend.

Clauses that permit an adjustment in payment to the contractor as freight rates vary, now in use by most of the states, were recommended to the others. This clause has been approved by the U. S. Bureau of Roads.

Some state regulations are obsolete on the amount of liability insurance required by contractors. AGC chapter secretaries and managers present announced that they would check with their departments to make sure adequate insurance is specified.

Other matters considered at the meeting include: (1) a reasonable policy to follow tying together construction projects; (2) an approved public relations program on highway work; and (3) increased financing for road building operations.

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A.S.C.E.–A.G.C. Joint Committee Studies Problems of Emergency

- Urges Intact Organizations in Civil Defense
- Against Taking Over Contractors' Equipment

» CIVIL defense, controls, priorities, allocations and other matters growing out of the present national emergency as related to civil engineering and the construction industry received serious study at a meeting of the Joint Cooperative Committee between the American Society of Civil Engineers and the Associated General Contractors of America in Washington on December 18.

The committee concluded that if priority controls on construction supplies became necessary, the plan of the 19 federal organizations serving as claimant agencies was logical. This conclusion was based on the fact that these departments have specialized organizations, including field offices, and the necessary experience.

Suggests Advisory Committee

The committee recommended a construction industry advisory committee for the Munitions Board along lines recommended last July at a meeting of key A.G.C. and military leaders. A similar advisory committee was recommended for the Office of Defense Mobilization. Early clarification of the specific work of the new ODM and the National Security Resources Board was urged by the conferees.

A.S.C.E. representatives announced that a special committee had been named by that society to deal with civil engineering as it relates to military matters.

In a discussion of newest developments in civil defense, it was recommended that all contractors' organizations be allowed to work as teams or groups, not as individuals, and that these organizations retain control of men and equipment. Removing the control of operation from the construction people would mean inefficiency, mismanagement and over-all ineffectiveness, it was felt.

Some study was given civil defense bills then pending before Congress (S. 4127 and H. R. 9278) which would call for much engineering and construction work financed with federal funds. Members of both organizations were urged to become acquainted with the extensive program.

The revised Standard Contract for Engineering Construction, now being developed by an A.G.C. subcommittee, will soon be turned over to an A.S.C.E. committee for cooperation in review and revision, it was announced.

To Study Escalator Clauses

The committee was in accord on the merit of the bill to reestablish the War Damage Corporation.

Some discussion was given to escalator clauses as applied to fluctuations in the price of steel and other supplies. This will receive further study. The committee condemned the equipment recapture clause used in World War II military contracts as working a hardship on contractors. Public housing in defense areas, subject of bills before Congress, should be built only after private enterprise had been given the opportunity to construct the needed facilities, it was recommended.

The A.S.C.E.-A.G.C. joint committee went on record as being in full agreement with the A.A.S.H.O.-A.G.C. committee action on highways (see page 46).

Shortages of engineers in the future appear highly probable, the committee believes, and action was urged for both engineers and contractors to take steps to meet this problem.

Admiral Kirby Smith, Raymond Concrete Pile Company, New York, and Dwight W. Winkelman, D. W. Winkelman Company, Syracuse, New York, were co-chairmen of the session.

$1 Million Saved on Dam

Savings of a million dollars have been returned to the Federal Treasury from appropriations for the Anderson Ranch Dam in Idaho, according to Reclamation Commissioner Michael W. Straus.

He said low bids on some work and new designs and plans for the $30 million dam now nearing completion on the Boise River have reduced the estimated cost by $1,689,960 in the last 18 months.

Kemper Completes Tunnel

The "miracle of Grand Valley" is now in its final stages. Complete disaster was a foregone conclusion when Rhoades & Shofner Bros., A.G.C., and Grafe-Callahan Construction Company, A.G.C., both of Los Angeles, shouldered the task of repairing a tunnel which irrigated more than $1.3 million worth of crops. The job was substantially completed a month ahead of schedule. (Earlier story in June CONSTRUCTOR, page 34.)

These two left the finishing touches to a third Los Angeles contractor, Kemper Construction Company, A.G.C, the successful bidder for the job of installing the lining in the 2,240-foot long, 12-foot high horseshoe tunnel.

Under the terms of the contract ($250,747.50), work was to be completed within 150 days after notification to proceed. Special provisions insure a supply of irrigation water for the 30,000 acres in the Grand Valley project, and if on March 15, 1951, the status of work does not indicate it can be completed before the irrigation season, the government may take action to permit the required flow.

Secretary of Interior Oscar L. Chapman announced that the award to the Kemper firm marks the concluding chapter of one of the most spectacular emergency construction jobs in water conservation history.

Michael W. Straus, Commissioner of the Bureau of Reclamation, stated that "the record-breaking speed with which the Grand Valley tunnel job has been handled is an excellent example of what can be accomplished through the cooperative efforts of our field forces, the contractors' organizations, and the water users when the drought threatened our irrigated lands."

Hathaway Heads A.S.C.E.

Gail A. Hathaway, Special Assistant, Chief of Engineers, Department of the Army, has been elected president of the American Society of Civil Engineers.

Mr. Hathaway is a member of the A.S.C.E.-A.G.C. Joint Cooperative Committee as a representative of the engineer society. He succeeds Ernest E. Howard, Howard, Needles, Tammen and Bergendoff, Kansas City, Missouri.

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Fire Code Changes Weighed for Non-Load-Bearing Walls

• B.R.A.B. Conference Studies Requirements

» CODE requirements for fire resistant ratings of exterior non-load-bearing walls are in need of revision. This was the unanimous conclusion of speakers who addressed a conference on "The Fire Resistance of Exterior Non-Load-Bearing Walls" held by the Building Research Advisory Board of the National Research Council November 21 in Washington.

Subjects included a general background of requirements, an explanation of what improvements were needed, a survey of the cost of non-load-bearing walls, the viewpoints of the research director, the contractor and the code official, discussion of fire hazards and fire protection, and proposed restrictions with respect to fire safety.

As a result of the conference, most of the important factors regarding the fire resistance of non-load-bearing walls have been set forth in a form which will be valuable to code officials and research engineers who will weigh and apply the data made available. This month a detailed report of the conference will be published by B.R.A.B., Executive Director William H. Scheick announced.

Outmoded Codes Restrictive

George N. Thompson, assistant chief, Building Technology Division, National Bureau of Standards, pointed out that many codes today do not distinguish between load-bearing and non-load-bearing walls. Failure to do so restricts the application of many cost-saving, modern building methods. He also declared that it was illogical to require a high degree of fire resistance for non-load-bearing exterior walls and at the same time permit the use of large areas of plain glass.

In pointing out the fire resisting functions of non-load-bearing walls he made four points: They can prevent the overlapping of flame externally from story to story; reduce the spread of fire from building to building; retard the spreading of fire by absorbing heat; and possibly provide shielding for firemen.

The manner in which outmoded building codes curtail and prevent the use of modern construction designs was accented by Robert L. Davison, research director, Howard T. Fisher & Associates, Chicago architect-engineer firm. He maintained that in many cases codes require an unreasonable margin of safety. But he stated that in no way are modern designers desirous of gaining use of new methods with a resulting increase of fire hazards. He contended that handicaps imposed by legal code requirements could be overcome if officials would take a common-sense approach to the use of new materials and methods. For example, temperature tests could be eliminated for walls in which there were to be window openings.

That more research is badly needed before existing codes can be altered was strongly emphasized by Emil J. Szendy, technical director, New York State Building Code Commission. He agreed that most codes need revision to allow for the use of new materials and methods, but pointed out that every code writer deals with a risk calculated on facts gained from practical experience. Until new methods are satisfactorily tested and analyzed, code writers will be compelled to use only the facts at hand, and thus have a tendency to recognize the use of conventional rather than progressive methods, he contended.

He warned that though requirements for non-load-bearing exterior walls were very often excessive and unrealistic, adaptation of any changes should be preceded by rational analysis rather than wishful thinking.

Dunham Sums Up Needs

In the concluding address, John W. Dunham, assistant chief structural engineer, Public Buildings Service, summed up the basic requirements of exterior non-load-bearing walls for the purpose of fire resistance: They must have a reasonable resistance to fires from without; they must be able to contain a fire from within; and they must deter the spread of fire from story to story. He suggested that exterior walls have at least two hours' fire resistance when separation between buildings is five feet or less. Walls separated by more than five feet but less than 30 feet should be fire resistant for a proportionately less period of time, and all walls should have a resistance of not less than one hour.

Other speakers were: J. Walter Severinghaus, Skidmore, Owings and Merrill, Architects - Engineers, New York; and James K. McElroy, assistant technical secretary, National Fire Protection Association, Boston. J. P. H. Perry, consultant, Turner Construction Company, A.G.C., spoke on the cost of exterior non-load-bearing walls.

This second B.R.A.B. research correlation conference was suggested by Andrew J. Eken, president of Starrett Brothers and Eken, A.G.C., New York contractors, and John O. Merrill, of Skidmore, Owings and Merrill, architects of New York. Conference chairman was Carl F. Boester, consultant, Purdue Research Foundation, Purdue University.

Contractor's Viewpoint

A highlight of the B.R.A.B. conference was an address by J. P. H. Perry, consultant of the Turner Construction Company, A.G.C., New York, which will be covered fully in the February issue of THE CONSTRUCTOR.

Mr. Perry dwelt on multi-story building where widespread efforts have been made to create a non-masonry spandrel wall, with analyses of costs and design for seven buildings constructed or under construction by the Turner organization, which will cost about $120,000,000 when completed.

Encouragement of designers and manufacturers in working out a practical "metal skin" for buildings or a prefabricated spandrel wall, where details of joints and connections appear to be the primary problem, was advocated by Mr. Perry.

The Building Research Congress will meet in London, September 21, 1951. Information and copies of the provisional program may be obtained by writing J. E. Woolston, United Kingdom Scientific Mission, 5th Floor, 1800 K Street, N. W., Washington, D. C. Topics to be discussed at this conference cover a wide range of subjects.

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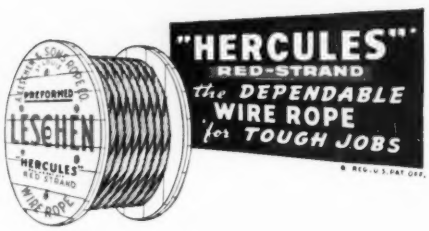

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Elections of Officers at Chapter Conventions

A number of chapters and branches of The Associated General Contractors of America have elected their 1951 officers at recent annual meetings as follows:

Florida East Coast Chapter heard national A.G.C. President Walter L. Couse, of Detroit, at its annual meeting attended by 66 members and guests in December. Mr. Couse stressed the importance of general contractors participating in civic affairs.

Officers chosen are: president, V. R. Gorham, and vice president, P. C. Lissenden, both of West Palm Beach; and secretary-treasurer, J. H. Birdsall, Palm Beach. Installed as directors were Ray Sheldon, West Palm Beach, and W. H. Arnold, Palm Beach.

Highway Construction Industry of South Dakota met last month jointly with the South Dakota Society of Engineers and Architects.

P. A. Bradbury was chosen president; Glenn Bergren, vice president; and John L. Materi, secretary-treasurer.

A feature of the chapter's 1951 program will be assistance to the South Dakota Good Roads Association in a drive for more highway funds.

Colorado Building Chapter extended for another year the terms of all incumbent officers: James R. Howell, Gerald H. Phipps, David A. Olson and N. R. Petry, all of Denver, as president, vice president, secretary and treasurer, respectively. Harold B. Joy was re-elected for five years on the executive committee.

Rio Grande Valley Chapter elected the following officers: president, E. J. Waitman; vice president, Jack Choate; treasurer, C. P. Thise. All are of Harlingen, Texas.

Directors are Frank G. Parker, Harold Hendricks, and E. E. Marchant, retiring president.

Austin Chapter re-elected Leslie F. Crockett as president and J. M. Odom as treasurer. Newly elected officers are John Broad and Frank R. Rundell, first and second vice presidents, respectively.

Robert Morris and Harold O. Eitze were elected directors for three years.

San Antonio Chapter elected J. C. Worcester as president, E. A. Baugh

as vice president, and G. W. Mitchell as treasurer.

South Texas Chapter chose the following as 1951 officers: president, E. P. Edgeworth, Jr.; vice president, W. M. Goldston; and treasurer, Guy Braselton, all of Corpus Christi.

Directors elected are C. L. Cox, W. H. Wolter and C. C. Hinchberger.

Waco Chapter elected 1951 officers at its annual meeting December 6.

The following will take office in January: president, William H. Smith; vice president, J. T. Hooker; secretary-treasurer, Joe L. Hicks.

Wisconsin Elects Thomsen

The vital role of the construction industry in rescue and disaster work in the event of an enemy bombing of communities was stressed by James D. Marshall, assistant managing director of The Associated General Contractors of America, at the annual meeting of the Wisconsin Chapter, A.G.C.

The chapter elected D. E. Thomsen as president, Millard Johnson as vice president, and re-elected J. Harry Green as secretary-treasurer and manager.

A.G.C. Managing Director H. E. Foreman and Dr. Verne C. Fryklund of the Stout Institute, Menominee, Wisconsin, spoke at the annual banquet.

Other speakers included C. J. Caddell, of the Wisconsin Industrial Commission, who outlined that agency's requirements concerning construction, and R. L. Moore, National Safety Council engineer, who spoke on the need for individual contracting firms to adopt a safety program.

Rayner Leaves A.G.C.

A. J. Rayner, former field representative of The Associated General Contractors of America, on November 15 became Executive Secretary of the New York State Bituminous Concrete Producers Association. His headquarters will be in Albany. The sixth annual convention of the association was held in Buffalo on December 14.

While with the A.G.C., Gus, as he is known to his friends, worked on membership promotion in a number of states and helped to establish several new A.C.C. chapters.

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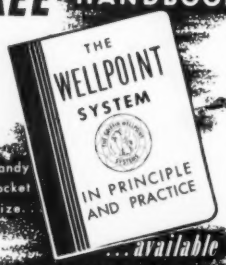

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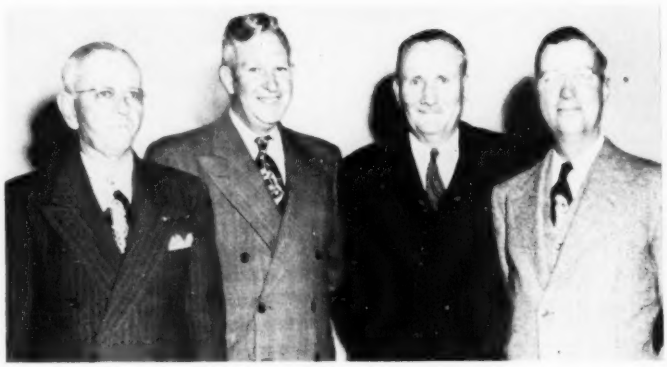

New Mexico Builders Elect Clough

The Associated Building Contractors of New Mexico elected the following new officers at its annual meeting in December: President, R. B. Clough, Albuquerque; vice president, W. M. Cooper, Santa Fe; and secretary-treasurer, S. E. Whittmore, Albuquerque. Alva J. Coats is manager.

New directors were also installed at this meeting. They are: C. W. Ellis, Santa Fe; H. D. Hughes, Roswell; and Raymond Griggs, Clovis.

The business meeting was followed by a dinner-dance attended by 188 members and associate members, wives, and invited guests.

In the picture above, left to right, are: Mr. Whittmore, Mr. Clough, Mr. Cooper and Jack Brennand, retiring president.

No. California Studies Defense Problems

» THE 32ND annual meeting of the Northern California Chapter, A.G.C., accented problems in the construction industry which have arisen out of the present defense program.

Manager Winfield H. Arata reported that the chapter's membership had doubled in the last five years and that services for the members were being expanded accordingly.

George C. Loorz, chapter president, stressed the value of the association to the construction industry. "We would have no more chance than the proverbial snowball if we as individuals attempted to do the work the association is now doing," he stated. Mr. Loorz' one year term will end in January when new officers for 1951 will be selected from the directors.

H. O. Parish, chairman of the chapter's labor committee, warned that wage freezes which are forthcoming would not mean the end of labor's demand for increases. He expects wage increases to be permitted on a controlled basis and that contracts tied to the cost-of-living index will gain broad acceptance.

During the meeting, a resolution was passed increasing the number of the chapter's directors from 12 to 14. Subsequently, the members voted to retain eight of the incumbent directors and elected six new ones. They are Charles Harney, Frank Modglin, John O'Connell, Peter Young, Earl Parker and Ralph Brown.

Other activities on the program included motion pictures showing military developments in Korea, a talk on construction problems in Korea by Colonel K. M. Moore, C. E., who had assisted in preparing facilities for American occupation, and the introduction of unit commanders of the Army-A.G.C. reserve units.

Gardiner Johnson, attorney for the Northern California Chapter, spoke on the legal dangers of on-the-job hiring. He warned that the easiest way to become entangled with labor was to be careless in observing the preferential hiring clause in a master agreement.

Frank A. Clarvoe, editor of *The San Francisco News*, and Captain H. F. Ransford, district public works officer of the 12th Naval District, also spoke.

Texas Against Licensing

Unanimous disapproval of a proposed law to license general contractors in the State of Texas was voted during the last meeting of the Texas A.G.C. Executives Council held in Dallas.

Representatives from 10 of the Texas Chapters were present at the two day meeting. Discussions concerned the liability of bonding companies on public works, equipment registration, wage and hour law, the Alaska construction program, war emergency termination clauses, and material shortages.

New council officers elected at the meeting are: president, Fred Fisher, Houston Chapter; vice chairman, F. S. Oldt, Municipal Contractors Association and Texas Highway Branch; secretary, Loy Duddleston, who is secretary of the Houston Chapter.

The council approved the appointment of a legislative committee which is to keep all the Texas chapters informed of proposed legislation. Members are Messrs. Fisher and Oldt, and all Texas chapter secretaries.

Host for the meeting was the Municipal Contractors Association.

A.G.C. Branch and Chapter Conventions

» ANNUAL meetings scheduled by chapters and branches of The Associated General Contractors of America, as reported to THE CONSTRUCTOR this month are:

Jan. 10-11, 1951. A.G.C. OF IOWA. Des Moines. Fort Des Moines Hotel.

Jan. 11, 1951. SAN DIEGO CHAPTER. San Diego. El Cortez Hotel.

Jan. 11-12, 1951. KANSAS CONTRACTORS ASSOC. Kansas City. President Hotel.

Jan. 11-13, 1951. A.G.C. OF MINNESOTA. Minneapolis. Radisson Hotel.

Jan. 12, 1951. ALABAMA BRANCH. Birmingham. Tutwiler Hotel.

Jan. 12-13, 1951. MONTANA BUILDING CHAPTER. Butte. Finlen Hotel.

Jan. 12-13, 1951. MONTANA CONTRACTORS' ASSOC., INC. Butte. Finlen Hotel.

Jan. 13, 1951. OKLAHOMA BUILDERS CHAPTER. Oklahoma City. Skirvin Hotel.

(Continued on next page)

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ALL-STEEL CONSTRUCTION, of extra thick, precision machined, aircraft quality steel, adds years of economical, dependable performance.

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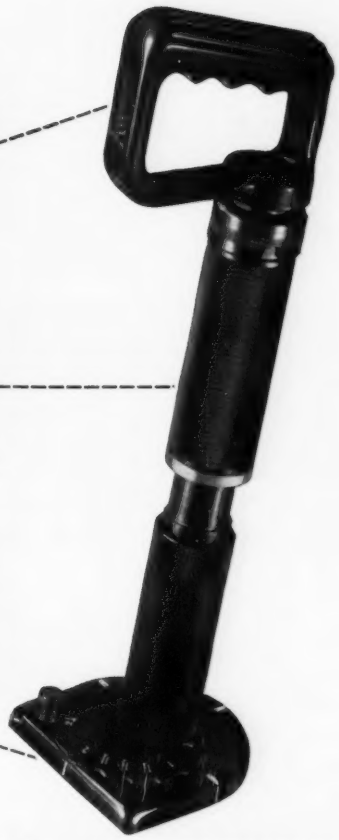

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The only precision paver that automatically paves to grade line, is almost instantly adjustable for widths to 12'6" and lays any type material to a uniform density of mat not possible with machines which must put weight or traction on the new-laid surface.

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Another labor-saving, cost-cutting advancement. Diagonally adjustable rear screed works material solidly against upper form on curves and pitched slab, increases accuracy of all finishing, avoids tearing stiff mixes.

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CHAPTERS • BRANCHES

Jan. 17, 1951. DETROIT CHAPTER. Detroit. Detroit Athletic Club.

Jan. 17, 1951. LOUISVILLE CHAPTER. Louisville. A.G.C. Building.

Jan. 19, 1951. MILWAUKEE CHAPTER. Milwaukee. Schroeder Hotel.

Jan. 19, 1951. RHODE ISLAND CHAPTER. Seekonk. Hearthstone.

Jan. 19-20, 1951. INTERMOUNTAIN BRANCH. Salt Lake City. Hotel Utah.

Jan. 20, 1951. A.G.C. OF WEST VIRGINIA. Charleston. Daniel Boone Hotel.

Jan. 20, 1951. KANSAS CHAPTER. Kansas City. President Hotel.

Jan. 25, 1951. IDAHO BRANCH. Boise. Hotel Boise.

Jan. 26, 1951. CENTRAL CALIFORNIA CHAPTER. San Francisco. St. Francis Hotel.

Jan. 26-27, 1951. COLORADO CONTRACTORS ASSOCIATION. Denver. Shirley-Savoy Hotel.

Jan 26-27, 1951. A.G.C. OF NORTH DAKOTA. Fargo. Hotel Gardner.

Jan. 30, 1951. KANSAS CHAPTER, BUILDERS DIVISION. Topeka, Hotel Jayhawk.

Feb. 13, 1951. TACOMA CHAPTER. Tacoma. Winthrop Hotel.

Feb. 21-22, 1951. A.G.C. OF MISSOURI. Kansas City. President Hotel.

TENTATIVE DATES

Jan. 1951. ASSOCIATED BUILDING CONTRACTORS OF ROCKFORD, ILL. Rockford. Hotel LaFayette.

Jan. 1951. NEBRASKA BUILDING CHAPTER. Omaha. (Not selected.)

Jan. 12, 1951. BALTIMORE BUILDERS CHAPTER. Baltimore. Park Plaza Hotel.

Jan 15, 1951. NEW ORLEANS CHAPTER. New Orleans. (Not selected.)

Jan. 16, 1951. SOUTH FLORIDA CHAPTER. Miami. (Not selected.)

Jan. 19, 1951. MOUNTAIN PACIFIC CHAPTER. Seattle. Benjamin Franklin Hotel.

Feb. 1951. A.G.C. OF WYOMING. Cheyenne. Frontier Hotel.

Feb. 1951. KENTUCKY HIGHWAY DIVISION. Louisville. (Not selected.)

Feb. 9, 1951. CONSTRUCTORS ASSOCIATION OF WESTERN PENNA. Pittsburgh. Hotel William Penn.

Feb. or March, 1951. METROPOLITAN BUILDERS ASSOC. New York City. (Usually at University Club.)

Mar. 7, 1951. HOUSTON CHAPTER. Houston. Ben Milam Hotel.

June 18, 1951. TEXAS HIGHWAY BRANCH. Austin. Austin Hotel.

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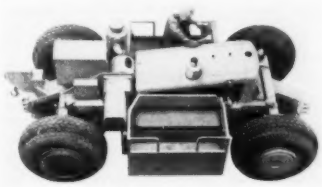
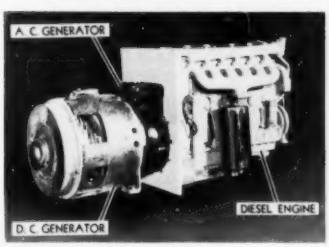
Electric Drive Tournatow Introduced

» FIRST MACHINE to put diesel-electric drivers on rubber-tire-mounted heavy equipment was introduced by R. G. LeTourneau, Inc., at a demonstration at Chicago November 17. The Tournatow uses its own diesel engine to generate its own power. Its alternating and direct current generators are driven by its diesel engine and provide power for all steering, forward, reverse and lateral movements of machine and for winch which operates through patented fairlead. This self-generated current is conducted through electric wires to electric motor and gear arrangement contained in assembly of each of its 4 wheels. There are only 4 moving parts in each wheel —pinion, 2 reduction gears and internal gear within wheel.



Tournatow

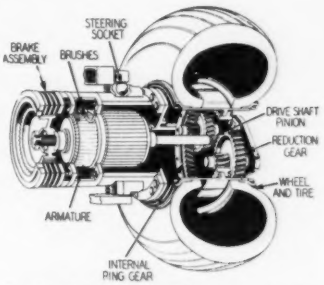
Powerful A.C. motors develop instant pulling power and can accelerate from standstill to top speed of 3,600 r.p.m. in 1/6 second. They can stop and reverse themselves to 3,600 r.p.m. in 1/4 second.



Tournatow power plant consists of diesel engine, A.C. generator and D.C. generator

Operation of Tournatow is through throttle of diesel engine, which is advanced to turn generators at required speed. Regulation of flow of electric current from generators to wheels is accomplished through device called potentiometer, action of which is similar to speed and power controller used on street cars.

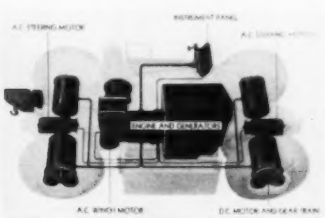
Characteristics of Tournatow are its ability to develop smooth start, smooth pull and quick and easy stops. Power stop can be accomplished by returning controller to "off" position. Steering is accomplished by use of push buttons; forward and reverse movement by rotating controller.



Sectional drawing of Tournatow's electric wheel

Tournatow's use of flexible wires to transmit current from its power plant to motors placed at points of application eliminates necessity of final drive gears and shafts, of differential, transmission, universal joints, hydraulic braking system and other mechanical gearing and linkages.

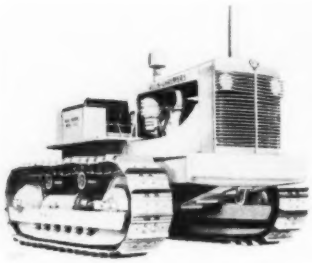
Tournatow is powered by military standard G.M.C. 6-cylinder, 2-cycle diesel engine capable of developing 186 h.p. at 1,800 r.p.m.



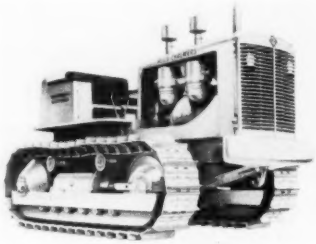
How electric current is conducted to wheels and steering mechanism

Earth Auger—*Petersen Engineering Co., 4126 26th St., San Francisco.* "Pengo" twin-helix auger is made to fit highway earth-boring machine and can be used with most makes of power-driven earth-boring machines by means of adapters. Augers are made in 9 sizes for hole diameters to 36". Twin-helix design eliminates back thrust against side of hole. Each half-helix is equipped with shank plate provided with replaceable cutting points of abrasion-resistant alloy steel.

Tractors—*Allis-Chalmers Tractor Division, Milwaukee 1.* Two new crawler tractors are Models HD-9 and HD-15. HD-9 weighs 18,500 lbs. and has drawbar h.p. rating of 70. HD-15 weighs 27,500 lbs. and develops 102 h.p. at drawbar. Both have 6 speeds forward and 3 reverse. Machines have constant mesh transmission with separate reverse gears. Power is provided by heavy-duty G.M. 2-cycle diesels. These engines utilize unit injection system. Other features are unit assembly construction; positive seals in final drive, truck wheels, idlers and support rollers; adjustable seat; boosted steering; convenient grouping of controls; self-energizing brakes; tapered cowl for better visibility.

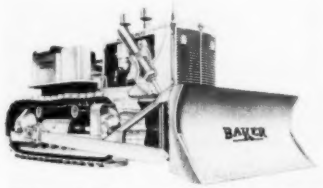


Allis-Chalmers HD-9



Allis-Chalmers HD-15

Bulldozers—*Baker Manufacturing Co., Springfield, Ill.* New bulldozers, gradebuilders and root rippers are announced for Allis-Chalmers HD-9 and HD-15 tractors. Both engine-mounted hydraulic and cable-operated models are available. Hydraulic models retain Baker features of direct lift, positive down pressure, positive hydraulic hold and engine accessibility. New feature is fingertip control, through short linkage between blade control lever and hydraulic control valve.



Baker bulldozer for Allis-Chalmers HD-15

Seat-Mounted Tractor Fuel Tanks—*Caterpillar Tractor Co., Peoria 8, Ill.* Seat-mounted fuel tanks with 30-gal. capacity will become standard equipment for D4 tractors in January

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1951. Current fender-mounted fuel tanks will be offered as optional equipment. Other improvements announced for D4 tractors are: heavy-duty, plate-type fenders that are free from obstructions to provide more room for installations of attachments; new operating levers and controls for clutches, gear shift and brakes; new, out-of-sight tool box, located under seat. Tool box is fabricated as part of seat-mounted fuel tank assembly.

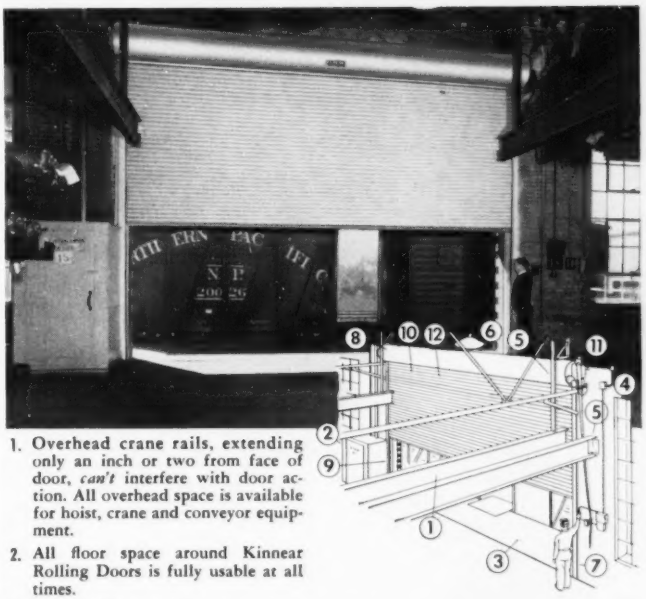
Wellpoint Pump—*Complete Machinery and Equipment Co., 36-40 11th St., Long Island City 1, N. Y.* Small wellpoint pump with large capacity is easily portable, due to smaller size and lighter weight, and to being mounted on 2 pneumatic tires. It fits all types and sizes of wellpoint systems, manufacturer states, and has special outlet which may be used in jetting. It is powered by Wisconsin air-cooled V.P.4 gasoline engine.

Complete Machinery and Equipment Co.'s wellpoint pump

Crushing Plant—*Universal Engineering Corp., Cedar Rapids, Iowa.* Model CSE "Traveler"—gravel crushing, screening and loading plant consists of jaw crusher, shovel-loading hopper with reciprocating feeder and trap grate, feed conveyor, one-deck inclined gyrating screen, delivery conveyor, return bucket elevator and power unit mounted on steel gooseneck truck with pneumatic tires. Four sizes are available with 916, 1016, 1020 or 1024 jaw crushers in either bronze or roller bearing types.

Universal CSE "Traveler"

No other doors offer all these advantages



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6. Light from overhead fixtures is never blocked off by Kinnear Rolling Doors, they coil compactly above the opening.
7. Wind can't blow Kinnear Doors back and forth, or damage them. Edges are anchored in steel tracks from floor to ceiling!
8. Kinnear Rolling Doors open straight upward, coiling completely out of the way of traffic, safe from damage.
9. The opening is cleared from jamb to jamb and floor to lintel. No projecting edges or parts to obstruct opening.
10. A continuous curtain of strong interlocking steel slats gives you extra protection against fire, theft, intrusion, wind, weather and accidental damage.
11. Kinnear smooth, upward action is ideal for time-saving motor operation, with convenient remote control. Rugged Kinnear motor operators do the trick.
12. Kinnear's interlocking steel slat curtain is not only more rugged and longer lasting, but permits any number of slats to be individually replaced if accidentally damaged. Lower maintenance costs!

You get many other advantages in addition to those highlighted above in Kinnear Rolling Doors. They are built any size, with motor or manual operation. Easily installed in old or new buildings. Write for complete information or recommendations

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Saving Ways in Doorways
KINNEAR ROLLING DOORS

Kinnear Rolling Doors

Concrete, Asphalt Saws—*Clipper Manufacturing Co., Concrete Saw Division, 2800 Warwick, Kansas City 8, Mo.* Three portable saws have cutting speed of 12′ per minute in asphalt and up to 5′ per minute (1″ deep) in limestone concrete. Maximum depth of cut is 6½″. Gasoline-powered saws are offered in 2 models: C-75 with 7½ h.p. engine, and C-130 with 13 h.p. 2-cylinder engine. Models C-15 and C-20 are powered with electric motors. Model CHD makes it possible to convert Clipper masonry saw HD to concrete sawing. Features are floating 3-point suspension, positive screw feed, streamlined design. Fully described in Bulletin 1 available from manufacturer.

Clipper concrete saw

Galvanized Steel Windows—*Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit 11.* Factory-galvanizing of "Fenestra" windows went into production about November 1, with aim of producing maintenance-free steel windows. Windows will need no paint. Hot-dip, keyed-in galvanizing process will be applied to "Fenestra" architectural, industrial, residential and apartment steel windows. Galvanizing will be applied after fabrication so no part of metal area will be left unprotected. All hardware and fittings will also be protected against corrosion. After being galvanized, windows will be Bonderized, providing finish and base for decorative paint finish.

"We build MORE foundations AT LOWER COST WITH SYMONS FORMS"

1. Connecting Bolt.
2. Two-Way Form Tie.
3. Tightening Wedge.

Simple, sturdy hardware means fast erection and fast stripping. Without nails, forms last twice as long. Contractors report substantial savings in labor and material costs as well as important savings in time.

Panels with steel ribs every 12 inches are recommended for heavy pressure. Ribs allow 1300 pounds pressure per square foot.

Pine, Plywood, Plastic Plywood, or Magnesium forms are available—also hardware with which to build your own. Forms may be rented with purchase option. Send plans for engineered form layout.

COLUMN CLAMPS
FORMS
Symons SHORES

SYMONS CLAMP & MFG. CO.
4259 West Diversey Avenue, Chicago 39, Ill.
Please send me the items checked.
Information regarding Symons Forms
☐ Catalog and Prices ☐ Construction details
☐ Samples ☐ Layout and estimate (our plans under separate cover)
Information regarding other Symons Products
☐ Column Clamps ☐ Bar Ties and Tie Chairs
☐ Safety Shores ☐ Scaffolding

Name_____
Address_____
City_____ Zone____ State_____

MC Self-Raising Tower-Hoist

THE INDUSTRY'S MOST VERSATILE

- Picks itself up
- Easily extends
- Lifting heights up to 94 feet
- Single or Double Drum Hoists
- Platform speed—100 ft. per min.
- Lifting capacity—2,500 lbs.

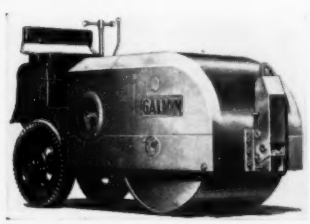
Optional Equipment: Gin Pole Assembly, "Chicago" Boom, Tip-Over Bucket, Truck Mounting, Interchangeable 10′ Extensions.

CONSTRUCTION MACHINERY COMPANIES
WATERLOO, IOWA

Grader—*The Galion Iron Works & Mfg. Co., Galion, Ohio.* Extra-heavy-duty Model 118 motor grader features improved transmission of constant-mesh type. It has 6 overlapping forward speeds from 1.3 to 22.6 m.p.h. and 2 reverse speeds, with high of 10.5. It has 100 h.p. diesel engine, positive all-gear, 4-wheel tandem drive, full hydraulic control, box-type single-member frame, high-arched for maximum adjustment of blade. Standard equipment includes hand steering with hydraulic booster and large front tires same size as rear tires. Available as extra equipment is hydraulic shiftable moldboard which permits maximum extension of blade 103″ beyond rear tires with 13′ moldboard. Weight is from 23,560 lbs. up depending on extra equipment.

Galion 118 motor grader

Roller—Galion announces several advancements in new model variable weight portable roller. Steering is done by hydraulic power under fingertip control. Spur gear final drive replaces old chain drive and constant-mesh transmission eliminates gear-clashing. Other improvements are: Twin Disc, over-center, forward and reverse clutches; new design hydraulically operated towing hitch which folds back compactly against roller housing when not in use. Compression under roll, without water ballast, is listed at 130 lbs. per in. of roll width. With 2,300 lbs. of water added, compression is raised to 192 lbs. per in. Compression roll is 48″ in diameter by 42″ wide. It is fitted with mats and sprinkler system.



Galion portable roller

THIS MAN CAN TELL YOU

...About
CONTINENTAL
RED SEAL POWER

When you're in the market for internal combustion power, look into the experience of other users, checking as near the actual job level as you can. Ask the man who runs the machine, in any of a dozen fields, and the answer will be pretty much the same: Continental Red Seals deliver dependable, low-cost power. They require little attention. They're mighty easy on fuel. This uniformly high esteem results from *specialization.* There's a Continental Red Seal model engineered to meet the needs of virtually every job, in industry, construction, transportation, and on the farm. There's a Red Seal engine or power unit built expressly for YOUR application. Get it, and you'll have the one best power source for your job, because it's built to do one thing and do it well.

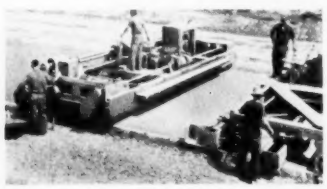
FACTORY-AUTHORIZED SERVICE AND GENUINE CONTINENTAL RED SEAL PARTS AVAILABLE FROM COAST TO COAST

Continental Motors Corporation
MUSKEGON, MICHIGAN

Impact Wrench—*Independent Pneumatic Tool Co., 175 State St., Aurora, Ill.* "Thor" 5/8" "Silver Line" universal electric impact wrench is designed for heavy-duty nut-setting jobs on trucks and other heavy equipment. It features same mechanism as "Packy," 3/8" wrench, but all parts are larger. Operating at 2,000 r.p.m., wrench delivers 1,850 impact blows per minute both forward and reverse. Weighing slightly over 12 lbs. and measuring 11 3/4" over-all, tool is equipped with detachable dead handle. Wrench has 5/8" square spindle and will drive machine screws up to 5/8" and up to #22 wood screws. Other features are positive-positioning of reversing switch and spindle bushing lock.

"Thor" 5/8" impact wrench

Concrete Spreader—*Jaeger Machine Co., 528 Dublin Ave., Columbus 16, Ohio.* Screw-screed concrete spreaders are available in 2 models: 10' to 15' width and 20' to 25' width. New machine combines transverse, 12", oscillating screed with Jaeger remixing-compacting screw spreader. Strike-off plate, immediately behind screw, makes initial strike-off to approximate grade line, then 12" oscillating screed makes precision strike-off and meters right amount of material to following finisher. Both models offer 5' adjustability in 6" stages. Spreading screw on 10' to 15' model is reversible for spreading material



Jaeger screw-screed concrete spreader

FAST ON-THE-SPOT REPAIRS

With This Portable Welder!

This inexpensive "Lincwelder", made by Lincoln Electric Co., Cleveland, O., is easily mounted on running gear or truck for welding service anywhere.

Welding at the breakdown-scene . . . adds up to savings in time and labor with this light but rugged 180 amp. Lincoln Welder, powered by a two-cylinder Wisconsin Heavy-Duty Air-Cooled Engine.

The performance satisfaction of Wisconsin Engine power increases not only the reliability of equipment in all fields, but also increases the confidence of both equipment user and builder. They're sold on such features as self-cleaning, thrust-absorbing Timken tapered roller bearings at both ends of the crankshaft . . . fool-proof air-cooling, from sub-zero to 140° F . . . an easily serviced OUTSIDE rotary type, high tension magneto with impulse coupling, for quickest any-weather starts . . . plus heavy-duty construction, inside and out.

Your investigation is invited! 3 to 30 hp., 4-cycle single-cylinder, 2-cylinder, and V-type 4-cylinder models.

WISCONSIN MOTOR CORPORATION

World's Largest Builders of Heavy-Duty Air-Cooled Engines

MILWAUKEE 46 WISCONSIN

dewater the Complete way

The swiftest, surest dewatering method is also the simplest and most economical. "Complete's" patented fluted tube wellpoints combine compactness with lightness and strength—enable you to handle tougher jobs at lower costs—keep you on firm ground always. Write, wire or phone for estimates—we have the equipment, experience and personnel.

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toward either side form. On 20′ to 25′ model, screw is divided and permits spreading from center to side forms, side forms to center or toward either side with both halves of screw operating in same direction. Oscillating metering screed is Jaeger's single-lever quick-crown-change type, hydraulically lifted and with spring-cushioned action.

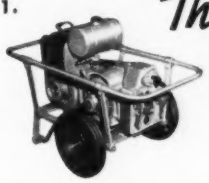
Asphalt Spray Bar—*Wm. Bros Boiler and Manufacturing Co., Minneapolis.* Non-clogging, no-drip bar is designed to fit all distributors. Known as "Spraymatic," it is full-circulating, 3-section hot bar featuring positive end-to-end circulation system accomplished by means of center partition length of bar, non-clogging, self-screening nozzles and ring-packed, non-leaking 45° swing joints. Any slugs in lines are melted and when nozzles are opened they all fire simultaneously. Bars are built with nozzles on either 4″ or 6″ centers and in all lengths up to 24′. Bars up to 12′ are furnished with 7′ center section and right and left end sections. Bars over 12′ have flanged extensions bolted on.

Cartoon Character Named

"Hardy Hal" was the name chosen by the judges as the winner in the contest sponsored by Halliburton Portland Cement Co. of Corpus Christi, Texas, for a name for its cartoon character featured in its ads. The figure, with a Shell Brand cement bag body, an oyster shell head and an appealing grin, will be associated with all Halliburton ads and publicity. Winner of the first prize of $500.00 was C. C. McCleary of Lynch Davidson Lumber Co., Mission, Texas. Second prize of $300.00 was awarded to R. R. Richter of L. B. Wehring Lumber Co., Corpus Christi. The third prize of $200.00 was won by Jose Mora of Farris Lumber Co., Mercedes.

for
MUNICIPAL PAVING
HIGHWAY WIDENING
and PATCHING
BRIDGE DECKS
SPILLWAYS
and
MANY OTHER JOBS

THE JACKSON

1.


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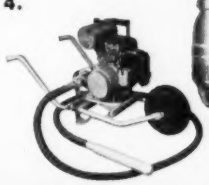


ELECTRIC, VIBRATORY SCREED is FAR FASTER-BETTER!

It strikes off to any crown, undercuts at curb or sideform, works right up to and around manholes and other obstructions. With it center construction joints may be eliminated and full widths (up to 30') poured. Requires only two men on widest slab, due to strong tendency to propel itself. It's the only screed that can be rolled back on 4 rollers for second pass. Contractor has only to secure plank cut to proper length and crown to be set for any job. Powered by Jackson 1.25 KVA Portable Power Plant.

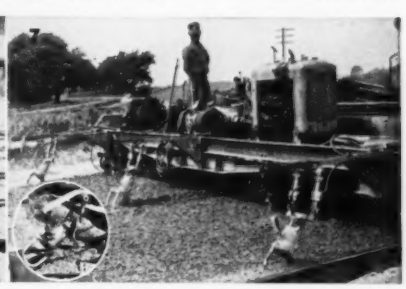
IDEAL VIBRATORS FOR EVERY TYPE OF JOB

1. Power Plant used with Screed, 1.25 KVA. Others of 2.5 and 5 KVA capacity — all produce both single and 3-phase 110 V., 60 C. AC and have generators requiring no maintenance or adjustment. 2. Hydraulic vibrator with time-saving 50' reach. 3. Powerful, easy to handle electric Vibrator — shafts up to 28'. 4. Finest of engine-driven flexible-shaft vibrators. 5. Revolutionary, fast, granular soil vibratory compactor. 6. Heavy-duty mass construction vibrator — a "must" on dams, etc. 7. Sideform Vibrator, mounts on finisher, saves better part of 2 men's labor. Write for "Pocket Guide" describing the entire line.

FOR RENT OR SALE AT JACKSON DISTRIBUTORS

ELECTRIC TAMPER & EQUIPMENT CO.
LUDINGTON MICHIGAN

5.

7.


Dams—*American Hoist & Derrick Co., St. Paul 1, Minn.* American revolver cranes are shown on 12 outstanding dam construction jobs in Catalog 400-R-2. Large pictures show cranes helping to build such projects as Garrison Dam, Clark Hill Dam, Whitney Dam, Friant Dam, Grand Coulee Dam and pumping station, Fort Randall Dam, Bull Shoals Dam, John Martin Dam, Marshall Ford Dam, Grand River Dam. Table gives rated lifting capacities of American revolvers.

Crane and Dragline—*Manitowoc Engineering Works, Manitowoc, Wis.* Model 3900 long-reach crane and dragline is described in booklet (Form 39-50). It gives working ranges and capacity tables and explains how added capacity claimed at long radii is obtained. Features and machinery details are described and illustrated. Gear diagrams are included and pictures show optional equipment available for special jobs. Diagrams and pictures show how crane can be loaded and unloaded for rail shipment by handling its own components.

Mobile Crane—*Bay City Shovels, Inc., Bay City, Mich.* Machine design and job applications of "CraneMobile" are described and illustrated in 24-page catalog. Details of crane and carrier are pictured and features described. Job pictures show machine working on heavy construction jobs, setting steel, operating in oil fields, handling materials, logging, doing utility and mining work.

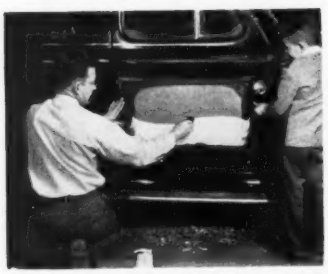
Pipe and Fittings—*Naylor Pipe Co., 1230 E. 92d St., Chicago 19.* Bulletin 507 describes "Lockseam Spiralweld" steel pipe, fittings, couplings and accessories. Physical properties of Naylor pipe, including table on collapse pressure, are detailed. Typical applications are illustrated.

Bulldozing—*Baker Manufacturing Co., Springfield, Ill.* Folder presents history of Baker bulldozers from "Baker-Mancy" scrapers, which were originally horse-drawn, to engine-mounted hydraulic 1950 bulldozer. Development of tractor-mounted earthmoving accessories is traced, and introduction of hydraulic models described.

Aggregates—*Great Lakes Carbon Corp., Building Products Division, 18 E. 48th St., New York 17.* "Permalite" light-weight aggregates are described in 8-page bulletin. It covers plaster and insulating concrete. In plaster section, data on recommended mixes and applications are given and fireproofing is covered. In insulating concrete section, data are given on uses, typical applications. Technical data cover complete mix design information, including materials required per cu. yd. for concrete, typical properties, mix proportions by volume. General description of "Permalite" is included.

Safety Belts—*Mine Safety Appliances Co., Braddock, Thomas and Meade Sts., Pittsburgh 8.* Complete line of M.S.A. safety belts is described in Bulletin CF-26. Included are body-type belts, harness-type belts, bridge and structural steel workers' belts. Accessory equipment, such as steel

Your **EQUIPMENT IDENTIFICATION** *is simple and economical with* **PROCESS SCREEN PLATES**



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Box 115 · Warsaw, Missouri

tail lines, lanyards, snaps and bos'n board, is described and illustrated.

Vibrators and Screeds—*Stow Manufacturing Co., 57 Shear St., Binghamton, N. Y.* Bulletin 507 details advantages of vibration in concrete work and recommends specific types of gas or electric vibrators for specific jobs. Recommendations are given for vibrating screeds. Full listing of available vibrator accessories is included.

Lumber—*West Coast Lumbermen's Assn., 1410 S.W. Morrison St., Portland 5, Oreg.* Booklet, *Where to Use Douglas Fir Lumber*, covers properties, characteristics and grades of Douglas fir, gives recommended grades for interior and exterior uses and points out its uses.

Diesel Engines—*The Buda Co., Harvey, Ill.* Bulletin 1506 describes new Buda DA "Dyna-Swirl" diesel engines designed for all types of heavy-duty trucks. Detailed specifications are included and full explanation is given of controlled combustion system. Pictures and stories about installations of engines are included.

Light-Weight Concrete—*Great Lakes Carbon Corp., Building Products Division, 18 E. 48th St., New York 17.* "Permalite" insulating concrete is presented in new technical data sheet, CDS-1. Description of product is given and its uses reviewed particularly for roof decks and floor fill. Data show number of mix ratios that can be used in designing concrete for specific applications. Also included are mix design data showing 28-day compressive strength, oven dry density and thermal conductivity, mix proportions by volume and materials required per cu. yd. of concrete.

Concrete Forming System—*Universal Form Clamp Co., 1238 N. Kostner Ave., Chicago 51.* Circular presents important points of "Uni-Form" forming, showing design features, aligning, assembly, stripping. Featured are methods of forming pilasters, corners, closures, culverts and tunnels, battered and circular walls.

PRESTRESSED CONCRETE

A rational method of construction for elevated express highways, heavy underpasses, underground garages, containers and ducts carrying liquids.

L. COFF, *Consulting Engineer*, 198 Broadway, New York 7, N. Y., Cortland 7-2753

THREE REASONS WHY MOST CONTRACTORS PREFER Thor PAVING BREAKERS

THEY GET THE WORK DONE!

Short-Travel tubular valve, precision balance of working parts turns every last ounce of AIR POWER into STRIKING POWER.

LESS MAINTENANCE

Exclusive Thor design and processing methods assure endless life for operating parts ... reversible block type piston provides perfect striking surface ... drop forgings throughout.

EASIER HANDLING

The tool does all the work! Perfect balance reduces vibration. Latch retainer simplifies steel change.

Full range of sizes – 32 lb., 59 lb., 70 lb. and 84 lb. Breakers, plus Sheeting Driver and two sizes of Spike Drivers. Free tests on your job at our expense! Independent Pneumatic Tool Co. (Thor Tools), Aurora Ill.

Air Feed Legs
Backfill Tampers
Belt Sanders
Bench Grinders
Chipping Hammers
Concrete Surfacers
Clay Diggers
Drills
Grinders
Electric Hammers
Impact Wrenches
Paving Breakers
Pile Driver
Rock Drills
Sanders
Saws
Sump Pumps
Wagon Drills

BUY IT from your DISTRIBUTOR

Thor PORTABLE POWER TOOLS

ELECTRIC • PNEUMATIC

WISCONSIN MOTOR CORP. recently built its No. 1,500,000 heavy-duty air-cooled engine. This engine represented completion of delivery of more than 18,000,000 h.p., which is more than 12 times the power generated by Niagara Falls.

W. E. Madden, vice president of the GEORGE HAISS MANUFACTURING Co., has been elected chairman of the Portable Conveyor Group of the Conveyor Equipment Manufacturers Association.

A 50 per cent increase in the floor space and manufacturing capacity of the plant at Lorain, Ohio, of NELSON STUD WELDING DIVISION of Morton Gregory Corp. has been authorized by the directors of the company.

Bertram V. Jones has been appointed advertising manager of LINK-BELT Co., succeeding the late Julius S. Holl.

Raymond F. Allen has been appointed general manager of SHUNK MANUFACTURING Co. Mr. Allen was formerly on the staff of vice president of manufacturing with General Electric Co.

During the past 5 years the 650 workers at ATLAS POWDER Co.'s blasting supplies plant near Tamaqua, Pa., have worked some 6,865,000 man-hours with no injury serious enough to require time off from work. In that period they have made more than 250,000,000 blasting caps.

J. S. Johnson has been appointed assistant to the president of UNITED STATES RUBBER Co. He succeeds G. R. McNear, who has been elected a director and managing director of North British Rubber Co., Edinburgh, Scotland, in which U. S. Rubber is a substantial stockholder.

CATERPILLAR TRACTOR Co. has adopted a voluntary allocation program designed to distribute equitably during 1951 its heavy machinery output to its dealer organization. In spite of expanded plant facilities, sales have outstripped production, necessitating return to a long delivery situation, according to Gail E. Spain, vice president.

E. F. Bentley, formerly contractors' equipment sales manager of DETROIT DIESEL ENGINE DIVISION, General Motors Corp., has been promoted to sales operations section manager. R. V. Baxley, formerly Mr. Bentley's assistant, becomes manager of contractors' equipment sales. L. H. Wells has been named his assistant.

The latest service and maintenance information on INTERNATIONAL HARVESTER industrial power products will be brought to the company's district office and distributor service personnel by 2 mobile training units which have started on a nation-wide tour. Instructors will present the International product servicing story with the aid of charts, slide films, and movie films. Sets of special tools and equipment will be displayed and usage will be detailed during the discussion period. Distributors plan to invite interested contractors, operators and service organizations when the training program is presented at their home offices.

Owen
Buckets?
.. EVERY
ONE!
Yes!—whether the scene of construction activity is concerned with EXCAVATING, DREDGING OR REHANDLING, you'll more than likely "spot" one or many Owen Buckets hard at work, coming up with "A Mouthful at Every Bite" and taking "More Bites per Day." Write TODAY for the Catalog.
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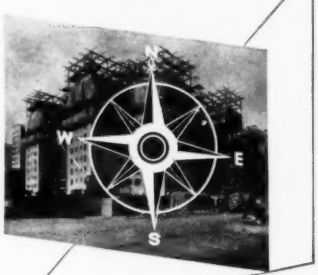
CLAMSHELL BUCKETS
INSURE A BIGGER DAYS WORK
THE OWEN BUCKET CO.
7750 Breakwater Ave. Cleveland, O.
Branches: New York, Philadelphia, Chicago, Berkely, Cal.
A MOUTHFUL AT EVERY BITE

PROMPT, NATION-WIDE

BONDING FACILITIES

FOR CONTRACTORS . . .



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AMERICAN SURETY COMPANY
NEW YORK CASUALTY COMPANY
SURETY FIRE INSURANCE COMPANY
100 Broadway • New York 5, N. Y.
Agents and Brokers Everywhere

Manufacturers' addresses are listed on page 71

Air-Entraining Agents
A. C. Horn Co.

Asphalt Plants (Portable)
Barber-Greene Co.
Iowa Mfg. Co.
White Mfg. Co.

Axles (Truck)
Eaton Mfg. Co., Axle Division

Backfillers
Bucyrus-Erie Co.
Cleveland Trencher Co.
Harnischfeger Corp.
Parsons Co.

Batchers
Blaw-Knox Division
Butler Bin Co.
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
C. S. Johnson Co.

Bearings (Anti-Friction, Tapered Roller)
Hyatt Bearings Division
Timken Roller Bearing Co.

Bins
Blaw-Knox Division
Butler Bin Co.
Heltzel Steel Form & Iron Co.
Iowa Mfg. Co.
C. S. Johnson Co.
Universal Engineering Corp.

Bits (Detachable Drill)
Ingersoll-Rand Co.
Timken Roller Bearing Co.

Blades (Grader, Maintainer, Snow Plow, Bulldozer, Scarifier)
Shunk Manufacturing Co.

Bridges
American Bridge Co.
Armco Drainage & Metal Products

Buckets (Clamshell & Dragline)
Blaw-Knox Division
Bucyrus-Erie Co.
Harnischfeger Corp.
C. S. Johnson Co.
Owen Bucket Co.
Wellman Engineering Co.

Buckets (Concrete)
Blaw-Knox Division
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
Jaeger Machine Co.
Owen Bucket Co.

Building Papers
Sisalkraft Co.

Buildings (Steel)
Allied Structural Steel Cos.
American Bridge Co.
Armco Drainage & Metal Products
Clinton Bridge Works
Gage Structural Steel Co.
Macomber, Inc.

Buildings (Steel)—Continued
Midland Structural Steel Co.
Smooth Ceilings System
Truscon Steel Co.

Bulldozers
J. D. Adams Mfg. Co.
Bucyrus-Erie Co.
LaPlant-Choate Mfg. Co.
R. G. LeTourneau, Inc.

Car Pullers
Clyde Iron Works

Ceilings
Smooth Ceilings System

Cement (Common and Special)
Halliburton Portland Cement Co.
Lehigh Portland Cement Co.
Lone Star Cement Corp.
Universal Atlas Cement Co.

Cement (White)
Trinity White, General Portland Cement Co.
Universal Atlas Cement Co.

Clamps (Hose)
Dixon Valve & Coupling Co.

Compressors
Allis-Chalmers Co.
Ingersoll-Rand Co.
Jaeger Machine Co.

Concrete Curing Material
A. C. Horn Co.
Sisalkraft Co.

Concrete Mixers, Pavers, Tampers
Chain Belt Co.
Construction Machinery Co.
Foote Co.
Jaeger Machine Co.
Knickerbocker Co.
Koehring Co.
Kwik-Mix Co.
T. L. Smith Co.
Worthington Pump & Machinery Corp.—Ransome Div.

Concrete Vibrators
Electric Tamper & Equipment Co.
Ingersoll-Rand Co.
White Mfg. Co.

Conveying Machinery
Barber-Greene Co.
Chain Belt Co.
Iowa Mfg. Co.
Joy Mfg. Co.
Link-Belt Co.
Universal Engineering Corp.

Cranes
Austin-Western Co.
Bucyrus-Erie Co.
Cleveland Trencher Co.
Clyde Iron Works
Harnischfeger Corp.
Koehring Co.
R. G. LeTourneau, Inc.
Link-Belt Speeder Corp.
Michigan Power Shovel Co.
Northwest Engineering Co.

GUTS AND POWER

FOR THE TOUGHEST TRENCHING JOB

CLEVELANDS

Thirty years of practical engineering stand behind CLEVELANDS reputation for rugged dependability. Elimination of excess weight and wide full-crawler mounting result in a low ground bearing pressure that means sure-footed traction even in sticky mud or soft fill. A remarkably low center of gravity permits working "impossible" grades and broken terrain. CLEVELANDS well-known toughness is based on special-strength alloys and refinements of structural design. Every component part is built with a wide margin of safety on shock and strain. And plenty of brute power lets you dig the hardest, rockiest ground on a year 'round basis. Get the full story from your local distributor or write direct.

THE CLEVELAND TRENCHER CO.
20100 ST. CLAIR AVE. • CLEVELAND 17, OHIO

White Heating Kettles Have Fire-Proof Tops

Cut-back and highly inflammable road repair material can be heated safely in White kettles. FIRE-PROOF top reduces fire hazard.

White asphalt and tar kettles are extensively used. They give long life and satisfaction.

Plain kettles or with hand or engine driven spray pumps for patching pavement. Thermometer, barrel hoist, warming hood extra. All oil burning. Semi-elliptic springs, pneumatic tires.

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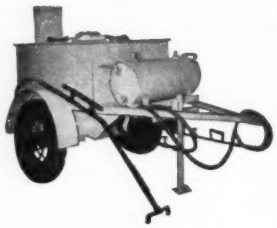

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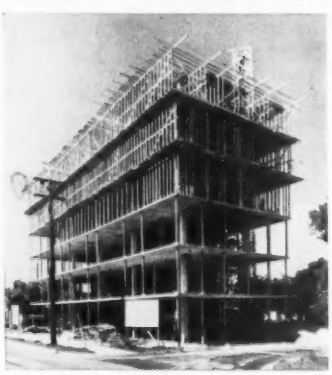

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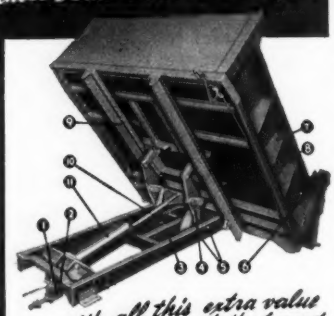

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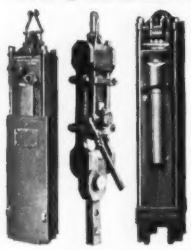

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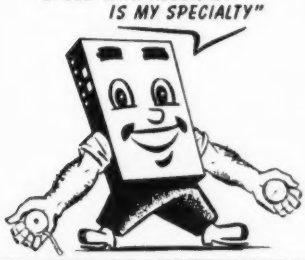

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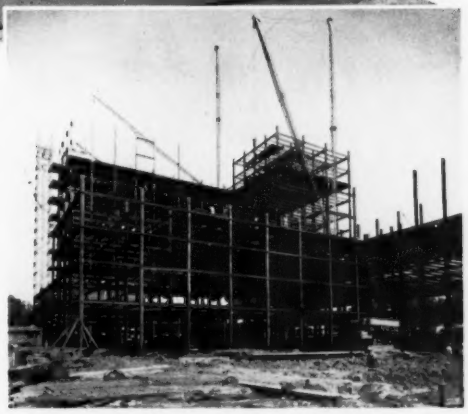

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